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1 MAY 1991

MINUTES OF THE DOD ANNUAL REVIEW OF PHYSICAL SECURITY EQUIPMENT (PSE) PROGRAM

FORT BELVOIR, VIRGINIA

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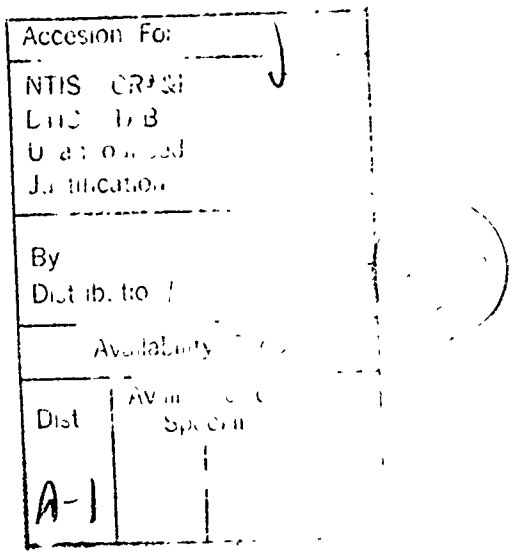
Minutes of the 1 May 1991 DOD Annual Review of Physical Security Equipment Programs



DOD ANNUAL REVIEW OF PHYSICAL SECURITY EQUIPMENT (PSE) PROGRAMS

1 May 1991

Building 392
Fort Belvoir, Virginia

The meeting announcement and agenda are provided at Attachment A. A list of attendees is provided at Attachment B.

I. OPENING REMARKS

The Chairman, Col. David Evans, opened the meeting and thanked the Army for hosting the meeting. He introduced the Department of Energy (DOE) representatives and explained that they had been invited to the meeting to share information, and to identify common areas of interest concerning physical security programs in an attempt to eliminate duplication of effort between DOD and DOE.

The Chairman commented that this meeting marked the end of a year of Physical Security Equipment Action Group (PSEAG) activities, and also served as the beginning of another annual cycle of PSEAG activities. During the past year the emphasis of the PSEAG was on prioritization of programs, funding, and coordination of Service activities. He was pleased with the accomplishments of the past year, especially the work of the two subgroups: the Joint Requirements Working Group (JRWG) and the Security Equipment Integration Working Group (SEIWG). The Chairman commended the Services for their participation and collective accomplishments, and reminded the attendees that the PSEAG had been established during the Vietnam era to obtain adequate physical security equipment (PSE) for units in combat. He stated that since the PSEAG was established, the required type and amount of PSE has been available when and where required. This was evident during Operation Desert Shield/Storm when all requests for PSE were answered in a timely fashion. Col. Evans emphasized that the group's current efforts will ensure that future commanders will have sufficient PSE.

Col. Evans stated that there did not appear to be a need to convene a meeting of the Physical Security Equipment Steering Group (PSESG) this June. The PSESG had offered to support the PSEAG and the Services on any issues that needed to be resolved at the steering group level, but all Services reported they had no issues to present to the Steering Group.

Lastly, Col. Evans stated that he had no indication that there would be changes to the planning figures, but if there were changes, he would provide them to the Services as they became available.

II. ARMY PSE PROGRAMS

The Army PSEAG representative, Mr. Jack Millett, HQ AMC, introduced LTC Petcu, PM-PSE, who briefed the Army 6.3/6.4 PSE programs. LTC Petcu briefly reviewed the PSE focus last year, and presented the Army's PSE "road map". He stated that the Integrated Commercial Intrusion Detection System I (ICIDS-I) was being fielded to meet the Army's materiel need requirements, although other Services' needs were taken into account in structuring the ICIDS contract. The draft Intrusion Detection System (IDS) Joint Service Operational Requirement (JSOR) is currently being staffed. Several smaller programs, such as the Small Console Equipment Group (SCEG) and the Fixed Installation Exterior Perimeter Sensor System (FIEPSS), have been incorporated into ICIDS-I program. The Commercial Security Interface Device (CSID) was incorporated into the Security Console Equipment Group - J-SIIDS (SCEG-J) program, and a

decision will be made later this year to determine if the J-SIIDS upgrade can be accomplished with materiel change proposals, in lieu of maintaining a separate 6.4 research, development, test and evaluation (RDT&E) program. A J-SIIDS personal computer annunciator (JPCA) is forecast to replace the current J-SIIDS monitor cabinet which currently has no display. This new configuration of J-SIIDS will not have an entry control interface capability.

LTC Petcu reported that the ICIDS-I solicitation closes on 29 May 91. Source selection will begin in June 1991, and a contract award is planned for August 1991. The ICIDS-I contract will be for one year with four option years. If the other Services' needs are not met by the ICIDS-I, then ICIDS-II fielding will be accelerated in an attempt to fully meet the approved JSOR. LTC Petcu also reported that there was a possibility of losing FY91 production dollars for the ICIDS-I. If this happens, the ICIDS-I award will be delayed until FY92 (a minimum of two months slip depending upon the timing of Congressional approval of the FY92 budget).

The Advanced Sensors I, II, and III programs will attempt to upgrade/improve the sensor suites associated with the ICIDS programs. These upgrades/improvements will be accomplished through materiel changes to ICIDS.

The Mobile Detection Assessment and Response System - Interior (MDARS - I) is a three-phased Non-Developmental Item (NDI) integration program. The initial Phase I capability will be fielded in 1994. The MDARS - Exterior (MDARS-EXT) is a two-phased program, and will transition from the Defense Nuclear Agency (DNA) to the Army in FY92. The MDARS-EXT will integrate a sensor suite with an exterior mobile platform that is being developed by the Joint Program Office for Unmanned Ground Vehicles. Ultimately, the interior and exterior MDARS systems will be integrated into the ICIDS console. This is scheduled to occur by the year 2000.

Col. Evans suggested the Global Positioning System as an effective navigation aid for the MDARS-EXT. He said that the Applied Research Laboratory at the University of Texas was making substantial improvements on other Army positioning systems. LTC Petcu stated that he would have his project leader, Mr. Jerry Edwards, contact LCDR Neil Ramsey, the DNA project point of contact, to investigate the applicability of this system to the MDARS. LTC Petcu also said that the majority of integration work will be completed at the Picatinny Integration Facility (PIF) at Picatinny Arsenal, New Jersey. Currently, the MDARS-I is undergoing technical feasibility tests, and the results will be available in June 1991.

LTC Petcu reported that the only currently active project under the Barrier Applications System (BAS) program was the sticky foam dispensing system. Other BAS projects, such as the Maintenance and Assembly Storage System (MASS) barriers, have been cancelled due to changes in Army operational requirements. Future projects for the BAS and the Lighting Application Systems (LAS) will be presented to the JRWG, as appropriate.

In response to MG Rigby's initiative to consolidate Army PSE research, development, and acquisition (RDA) functions, LTC Petcu said that he expects to assume the RDA functions for the J-SIIDS and Security and Force Protection Enhancement Resources (SAFER) programs in June 1991. LTC Petcu said that the SAFER was a Department of the Army (DA)-directed program, and that 11 systems had already been fielded. The Army combat developer, the U.S. Army Military Police School (USAMPS) has no requirement, however, for the program. Col. Evans reminded the attendees that the Army's Tactical Force Protection program (SAFER) and the Air Force's Dispersal Sensors are separate, but related programs, and that the two Services must coordinate with each other to ensure that there is not a duplication of development efforts.

LTC Petcu presented his funding slides for RDT&E, procurement, and installation. He pointed out that the RDT&E funding matched the DOD funding guidance. He also stated that there was $200K of FY91 RDT&E dollars that he could not spend as originally intended. The Chairman

said he would work with the Army on its execution. Mr. Doug Cavileer asked what the impact of base closures was having on the ICIDS program and the procurement funding. LTC Petcu confirmed that Ft. McClellan, which is on the list of proposed base closures, is still scheduled as the first installation to receive the ICIDS. Correspondence has been initiated to get a final decision on whether or not to proceed with the planned installation. Col. Evans asked what impact this might have on the Security Operational Test Site (SOTS) at Ft. McClellan. LTC Petcu responded that the plan to install ICIDS equipment at the SOTS has not changed LTC Petcu reported that the Army's obligation rate for the first two funding increments was 86%. The charts used by LTC Petcu are provided at Attachment C.

Mr. Jack Millett, AMCDE-CI, presented the status of the Army's implementation of the 17 management options listed in Appendix C of the DOD Physical Security (PS) Master Plan. Twelve of the items have been completely implemented, and five items have been overcome by events. Col. Evans stated that the Army had satisfactorily addressed all of their items; thus, there was no need to report their status in the future. The charts used by Mr. Millett in his presentation are also provided at Attachment C.

III. NAVY PSE PROGRAMS

Mr. Targosz, CNO (OP-09N), presented a briefing on the Navy PSE programs. He reported that the current Waterside Security System (WSS) initiative resulted from Congressional and DOD interest in the mid 80s in security at critical naval waterside facilities. The program will provide a security system capable of detecting, classifying, and assessing (above the surface) intruder penetration through water-boundaries, and communicating necessary information to a user friendly command, control and communications display. An evaluation of NDI components was completed at SUBASE Bangor, Washington in July 1986 to establish a baseline for RDT&E. It was determined that additional RDT&E was required in the areas of swimmer detection and the command and control console. Development of an integrated WSS was initiated, and initial testing of the fully integrated prototype WSS was completed in March 1991. An operational evaluation of the system is scheduled for FY92. The system is scheduled to be operational at Bangor in early FY94. A second system will be installed at Kings Bay, GA in 4QFY94. Unforeseen technical difficulties and the need to add a formal operational evaluation have caused the WSS to slip, and have placed additional funding demands on the program. Funds have been transferred from the planned Waterside Advanced Security Program (WASP) to support the WSS. Mr. Targosz also reported that the critical path item for the operational/production WSS is the procurement of the sonar component. A decision on the sonar procurement will be made by an Acquisition Review Board in 1QFY92. Mr. Cavileer asked who the Navy decision authority would be for the sonar. Mr. Targosz responded that it would be Naval Sea Systems Command (NAVSEA) (SEA-O6). Mr. Targosz added that DNA is working on an advanced swimmer detection sonar that would provide greater capabilities than the modified obstacle avoidance sonar that will be installed at SUBASE Bangor.

The WASP is a preplanned product improvement (P^3I) program to the WSS. The WASP is planned to be a transportable system, and will provide significant improvements over the WSS. Mr. Targosz stated that a Tentative Operational Requirement (TOR) was approved in July 1990, and a Development Options Paper is being prepared by the NAVSEA. He emphasized that any additional program delay in the WSS would cause a similar delay in the start of the WASP. Most of the Navy sponsored DNA projects will be part of the WASP when they transfer to the Navy. These include the Advanced Sonar and the Light Weight Water Barrier projects. The WASP is projected to start in FY92. A point paper on the WASP is included at Attachment D.

The Secure Structures Ashore (SSA) program is aimed at enhancing the hardening of structural components of facilities against various attacks. The program is considered a Non ACAT program since there is no follow-on procurement. The deliverables are drawings,

standards, and specifications. The SSA Program will terminate at the end of FY92. Col. Evans emphasized that the DOD physical security community has to continue working on specification development to assure that DOD structures will meet future technical threats. Mr. Cavileer said that the new DOD 5200.8R, Chapter 2, Military Construction, includes requirements on protective design, and the Services will be required to ensure that all new construction meets these requirements. Mr. Millett said that the Army was coordinating with the Navy on facilities hardening issues, and other related work to avoid duplication of effort.

The Shipboard Physical Security (SPS) program addresses the PSE used to protect ship facilities against unauthorized intrusion. Several of the products from the completed Shipboard Nuclear Weapons Security (SNWS) RDT&E program (i.e., the magazine security system and the protective voice portable communications system) have been incorporated into the SPS program. A revised Operational Requirement (OR) for the SPS is currently being drafted. The lack of an approved OR and shrinking resources has resulted in waning support for follow-on funding for procurement and installation by the platform sponsors. The difficulty in developing a requirements document that is acceptable to all resource sponsors may necessitate the development of three separate requirements documents, one each for aircraft carriers, surface ships, and submarines. Col. Evans added that any interface requirements between SPS and the WSS, Air Force Base and Installation Security System (BISS), or the ICIDS also need to be addressed.

Mr. Targosz reported that the Navy is continuing to monitor the progress of academia, the private sector, and other federal agencies in the area of Portable Explosives Detector (PED) equipment. This strategy is the result of a JRWG decision in mid-1989 that PED technology had not matured sufficiently to meet the JSOR. A SEIWG representative is a member of the Contraband Detection Subcommittee of the Interagency Advisory Committee for Security Equipment. The SEIWG will keep the PSEAG informed of technological progress. No DOD PSE RDT&E funds are currently being expended on PED work. Col. Corso stated that the Air Force is interested in receiving a briefing from the Navy on the existing state-of-the-art of PEDs. Col. Evans requested that the Navy sponsor a briefing by the Naval Explosive Ordnance Disposal (EOD) Technical Center to the JRWG to inform the members of the capabilities of current state-of-the-art PEDs.

Mr. Targosz stated that Version 2.0 of the DOD PSE Prioritization Program is now available, and is more user friendly than earlier versions of the software. The prioritization algorithm provides a method for rank ordering DOD RDT&E PSE programs. Additional upgrades to the software are being made, and Version 2.1 will be available in Fall 1991. No further changes are planned beyond Version 2.1. Mr. Targosz showed a chart depicting a rank ordering of the Navy's PSE programs using the prioritization algorithm. Col. Evans emphasized that the members of the JRWG must continue to exercise judgement when comparing the Services' prioritized lists.

Mr. Targosz provided a schedule through FY96 for the transition of DNA 6.2 projects to Navy 6.3/6.4 programs. All of the Navy sponsored DNA projects will transition into the WSS/WASP programs, except the Millimeter Wave project, which will transition into the SPS program. He also reported that the Navy had a 78.2% obligation rate for the first and second funding increments received from DOD. Col. Evans interjected that the third and final increment of FY91 RDT&E funding was released by DOD on 22 April 1991.

Mr. Targosz also presented charts illustrating the Navy PSE procurement, installation, and operations and maintenance funding projected through FY97 for the Nuclear Weapons (Ashore), Nuclear Weapons (Afloat), Electronic Security Systems (ESS), MILCON IDS, and major claimants programs. He said that in the Nuclear Weapons (Ashore) program the Navy used an Army contract to procure the armored personnel carriers, and an Air Force contract to procure the loader for the armored logistic transport vehicle. He pointed out, however, that a requirement existed for $49.5M of procurement funding for equipment/vehicles used at certain storage sites,

but only $25.8M was available. Mr. Cavileer suggested that the Nuclear Weapons (Ashore) program be an issue item to present to the PSESG, since there is no force reduction planned for these bases, yet the procurement budget has been reduced by nearly 50%. Col. Taylor, AF/SPX, suggested that it be worked as a Program Budget Decision (PBD) issue. Col. Evans requested that Mr. Targosz identify the specific budget line for the procurement funding of the Nuclear Weapons (Ashore) security so that OSD could work with the Navy on this issue. (Nuclear Weapons (Ashore) funding is included in Physical Security Equipment, Other Procurement, Navy, Element 0305134N, Budget Activity - 7; Program Line Item 0812800. Mr. Targosz next briefed the procurement funding for the security of Nuclear Weapons (Afloat). He pointed out that the installation costs for the security equipment is handled separately under the fleet modernization program. This sometimes leads to "disconnects" between procurement and installation of the equipment. Mr. Targosz also briefed the ESS procurement program and pointed out that some of the funding cuts were a result of delays in the WSS RDT&E program. He said that the average cost per site for procurement and installation of the WSS was approximately $6.2M. Mr. Cavileer asked if there was any support for WSS beyond the submarine community. Mr. Targosz responded that CNO (OP-03), Assistant Chief of Naval Operations (Surface Warfare) had expressed interest in WSS during Desert Storm.

As a final item, Mr. Targosz briefed the status of all of the Navy's management options from the DOD PS Master Plan, Appendix C. He said that all of the Navy's management options have been implemented. The one option that had previously been open dealt with the Navy's adoption of a standard DOD definition for the level of protection of assets (i.e., levels A through D). Mr. Targosz said that the Navy now uses the DOD definitions provided in DOD 5000.8R as a guide. Col. Evans agreed that all of the Navy items on the DOD PS Master Plan had been completed, and that future reporting would not be required. The charts used in Mr. Targosz's briefing are provided at Attachment D.

IV. MARINE CORPS PSE PROGRAMS

Maj. Terry Hess, USMC (Pos 43), provided an overview and funding status of the Marine Corps procurement programs. These programs include:

- The Physical Security Structure Upgrade Program (PHSSUP) - a USMC-wide program to continuously evaluate and upgrade armories and magazines, and address other physical security requirements.

- The Arms, Ammunition and Explosives Intrusion Detection System (AA&E IDS) - a USMC-wide program to provide state-of-the-art, expandable, NDI intrusion detection equipment. Maj. Hess reported that the Marine Corps had approximately $7M in Product Investment Funds (PIF), but the Corps, in order to obtain the funds, had to recognize manpower savings. He stated that the Corps was being forced to make difficult decisions regarding their mission support to the Navy.

- The Automated Entry Control System (AECS) - a USMC - wide program to enhance the security posture by automating access control to restricted areas, and by integrating access control with the AA&E IDS.

- The HMX-I Security Enhancements - to increase protection of high priority aircraft by determining, detecting, and denying unauthorized entry.

Maj. Hess reported that all active programs are ongoing, and that funding is programmed except for the funding shortfalls noted in the AA&E IDS and AECS programs. Funding for these "add-on" electronic security systems will be submitted as POM initiatives.

Maj. Hess then presented the status of the Marine Corps' management options and summary actions listed in Appendix C of the DOD Master Plan. All of the items have been completely implemented. Col. Evans said, therefore, that there is no requirement to report their status in the future. The charts used by Maj. Hess in his presentation are provided at Attachment E.

V. AIR FORCE PSE PROGRAMS

Col. Corso, HQ Air Force Security Police Center (AFSPC), announced that this would be his last meeting as the Air Force PSEAG representative, and that Col. Steve Manell would be replacing him as the Air Force PSEAG representative. He also announced that the functions of the HQ Air Force Office of Security Police (AFOSP) in Albuquerque, NM were being transitioned to the Pentagon, and that the name of the new organization would be the HQ AFSPC.

Col. Corso briefed the Air Force 6.3/6.4 PSE RDT&E programs. He said that the Air Force consolidated the RDT&E programs into eight separate programs under the BISS program umbrella as shown on Chart A. He explained that the Air Force Annunciator program, is a "stop gap" measure to meet immediate operational requirements while waiting for the full-capability DOD annunciator to be fielded. Three on-going efforts under this program are: 1) the development of a standard annunciator system, AN/GSS-41; 2) the development of a small annunciator system, AN/GSS-44; and 3) support of the Army ICIDS program. The development programs for the AN/GSS-41 and AN/GSS-44 will be concluded by the end of FY91, with the completion of actions necessary for Program Management Responsibility Transfer (PMRT) to the Air Force Logistics Command (AFLC). He stated that initial estimates of the Air Force production requirements for the ICIDS had been passed to the Army.

The Air Force Advanced Entry Control System (AECS) is an access control system to be employed at entry control points of restricted and controlled areas. The system will have up to three levels of personal identification, depending upon the security requirements. Col. Corso reported that a market investigation had been completed in FY91, and a system integration and production contract is scheduled to be awarded in FY92. The Initial Operational Capability (IOC) is scheduled for FY93. Production of 34 Air Force systems is planned through FY92, at a cost of $29.7M. Col. Corso reported that a concept definition system is being installed at Ellsworth AFB this fiscal year. Col. Evans asked if the Strategic Air Command (SAC) was satisfied with the system at Ellsworth. Col. Corso responded that SAC was pleased and that the system should be operational later this year.

The Dispersed Integrated Security System (DISS) is a new start program that encompasses both the Air Base Ground Defense and relocatable individual resource protection requirements. The DISS is a transportable system capable of operating in a wide range of missions against various threats. The program consists of three distinct elements. The first addresses the relocatable individual resource protection requirements using a complement of relocatable sensors. A contract award for the integration of commercial NDI products is scheduled for award in early FY92. The second elements addresses the requirement for intrusion detection and assessment systems for use in a dispersed mode. A production contract is scheduled for FY92. The third element is a complete systems integration effort. A contract will be awarded in FY92 to integrate the commercial and developed components. Col. Corso reported that an Air Force Statement of Need (SON) has ben drafted but is not yet approved. A JSOR has also been drafted and has been released for informal staffing. Col. Evans reminded the Air Force of the need to coordinate with the Army's Tactical Force Protection program to ensure that there was no duplication of RDT&E efforts. He also encouraged the Air Force to work the issue of coordinating and finalizing the requirements documentation.

Col. Corso reported that the Electronic Engagement System (ESS) responds to the need for force-on-force training equipment. The requirement was based on the Tactical Engagement Simulation Systems (TESS). In FY91 the Air Force initiated an effort to compare the Sandia-developed TESS with commercially available systems. It is hoped that the comparative review will show that the commercial system will meet at least 90% of the user requirements. Based on the results of the comparative review, an acquisition contract is planned for FY92. Col. Evans asked if the ESS was a single Service program. Mr. Targosz responded that the Navy has a need for this type of equipment, but the MILES equipment still meets Navy needs and the Navy procurement funding for TESS was reprogrammed.

The proposed Airborne Detection System (ADS) will detect ultralight aircraft, hang-gliders, para-sails, and parachutes advancing on protected areas. A full scale development program is scheduled to begin in FY95. Col. Corso said that there is a valid requirement for this type of system, however, the operational concept still needs to be developed. Col. Evans stated that the Air Force should present the requirements document to the JRWG. Mr. Desmond, DOE, said that his organization could use an ADS now.

The Aircraft Embedded Security System (AESS) will be a system of sensors which are built into the airframe of various aircraft; thus, eliminating the need for security forces to be in close proximity to the aircraft. A full scale development project is scheduled to begin in FY95. Col Corso stated that currently there is no official requirement for AESS, and that the concept of operation and the system needed to be developed in parallel efforts.

The Base and Installation Entry Control System (BIECS) will provide a means of automatically identifying authorized vehicles and personnel through various identity devices such as bar code decals and magnetic stripe ID cards. There is currently no official requirement for this program. If the program is supported it will likely be integrated into the AECS program. A planning date of FY98 has been established for the start of an RDT&E effort.

The Thermal Imager Systems program is a new, two-phase program. Phase one will integrate the Low Cost Uncooled Sensor Program (LOCUSP) imagers into common physical security applications for CCTV equipment. Phase two will apply LOCUSP imagers to development systems such as the Mobile Intrusion Detection and Assessment System (MIDAS). Documentation will be prepared in FY92 for a system integration and production contract which is scheduled to be awarded in FY93. Col. Willingham, DNA, added that the DNA 6.2 program for MIDAS was being closed out, but that the concepts developed under the MIDAS program would feed into the Air Force Thermal Imager program.

The Portable Reconfigurable Line Sensor is a line-of-sight sensor which can be employed in either a portable or fixed mode. The request for proposal (RFP) for this commercial off-the-shelf (COTS) NDI program is currently in preparation. The program is scheduled to last through FY93 at an estimated cost of $2.4M.

Col. Corso also briefed the Air Force funding, Charts A through D, for the RDT&E and procurement/installation programs. He reported that both the AECS and the portable line sensor procurement contracts would be 5-year indefinite delivery order, indefinite quantity type contracts that could be used by the other Services as a vehicle to procure equipment. He also presented the status of the Air Force's implementation of the management options from the DOD PS Master Plan. Of the 17 management options, ten have been fully implemented, while the other seven remain not implemented or at issue. Col. Evans said that the Air Force will have to report again at next year's annual PSE review on the status of the remaining seven management options.

Mr. Cavileer inquired about the Air Force RDT&E funding for the Active Denial program after it transitions from DNA. Col. Corso responded that it will be separately funded by SAC as a

security upgrade program. Col. Evans tasked the Air Force to confirm, in writing from SAC, the source of funds, as well as the level of funding available by fiscal year. He said that if SAC does not fund the RDT&E for Active Denial, then the Air Force will have to restructure its overall BISS RDT&E funding plan. Mr. Cavileer commented that the amount of procurement dollars remaining for the procurement of PSE has shrunk to such a low level that the size of the current RDT&E investment in PSE may be brought into question. Col. Evans responded that there is a changing trend in the DOD, whereby RDT&E investments will continue, but procurements will be scaled back unless needed in response to national emergencies. Fewer systems will be bought, but RDT&E funding to improve both technology and existing systems will continue. Col. Corso stated that the Air Force had committed 85% and obligated 71% of its funds.

The charts used by Col. Corso in his presentation and handouts pertaining to the Air Force PSE programs are provided at Attachment F.

VI. DNA FY92 6.2 PROGRAMS

Col. Willingham, DNA (OPNS), briefed the DNA FY92 PSE 6.2 programs. He presented a brief description of the continuing programs and the FY92 new start programs. He also presented a chart entitled "FY-1992 PRIORITIZATION LIST" which listed the overall priority of each program, as well as the lead and participating Service sponsors. Col. Willingham emphasized that the Services and DNA will both be involved in drafting the Statements of Work for the new start programs and that there will be continued coordination between DNA and the Services to ensure that the program proceeds in the intended direction. Col. Evans requested that the Adversary Testing program be incorporated into the other PSE programs requiring adversary testing rather than being listed as a separate program. Col. Willingham agreed. Col Willingham stated that the Air Force Systems Command (AFSC) was very interested in the Active Denial program, and that there was a possibility that the command was going to expend $50 million on the program. Both Col. Evans and Col. Corso expressed skepticism that any of that money would be available to support physical security applications of Active Denial. Col. Evans asked Col. Corso and Col. Willingham to investigate the issue and report their findings at the next PSEAG Executive Session. The Chairman also strongly suggested that the lead Services for the new start programs begin to work the issue of requirement documents/JSORs as soon as possible. He also asked Col. Willingham if all DNA programs that were ending in FY91 were transitioning to a lead Service. Col. Willingham, responded in the affirmative.

The status of DNA's management options from Appendix C of the DOD PS Master Plan are provided at Attachment G. All management options have been fully implemented.,and no future reporting requirements for these items exist. A copy of Col. Willingham's presentation charts, as well as program description summaries, are also provided at Attachment G.

VII. ADDITIONAL AGENDA ITEMS

a. Col. Evans introduced Dr. Dan Smith, Chief, Planning and Technology Development Branch, Office of Safeguards and Security, Department of Energy. Dr. Smith informed the members that his organization was responsible for the oversight, planning, and coordination of safeguards and security. He said that his office is interested in sharing information with DOD relating to physical security R&D efforts. Mr. Smith provided briefing charts explaining his organization, functions, and areas of interest (see Attachment H).

b. Review of PSEAG Action Items. The Chairman reviewed the status of open action items from the 6 Dece ,ber 1990 and 27 February 1991 PSEAG Executive Sessions. The status of the action items is provided below.

1. Action Item: The Air Force will provide their input on the termination of the TESS program or their commitment to continue the program as a single Service (Air Force) program.

Status: Closed. See paragraph V.

2. Action Item: The Air Force will relook the DISS Program to ensure that the program and all other Air Force RDT&E efforts fit within the new funding guidance provided by the PSEAG Chairman.

Status: Closed. See paragraph V.

3. Action Item: The Navy will develop a revised budget plan for the WSS program and delay WASP until WSS RDT&E is completed.

Status: Closed. See paragraph III.

4. Action Item: The Service and DNA members will update the status of their implementation of the DOD Physical Security Master Plan using the previous four charts provided and new chart formats provided by the PSEAG Chairman.

Status: Closed. See paragraph II-VI for the Army, Navy, Marine Corps, Air Force, and DNA respectively.

5. Action Item: The Air Force, as lead Service, will add Denial Systems to the Joint Requirements List.

Status: Open. Col. Corso reported that action had been initiated to add Denial Systems to the Joint Requirements List. However, the process has been delayed somewhat due to a change in procedures. He will continue to monitor the action until completion.

6. Action Item: The Services and DNA representatives will review their FY91 obligation rates and provide a status report.

Status: Closed. The obligation rates for the first two funding increments for each Service and DNA were provided during the meeting.

7. Action Item: The Services and DNA representatives will provide the prioritization of their PSE programs and the associated budgeting data.

Status: Closed. See paragraph II-VI for the Army, Navy, Marine Corps, Air Force, and DNA respectively.

8. Action Item: The Services and DNA representatives will provide an update on the implementation status of the management options outlined in the PSE portion of the DOD Physical Security Master Plan.

Status: Closed. See paragraphs II-VI for the Army, Navy, Marine Corps, Air Force, and DNA respectively.

9. Action Item: The Services and DNA will identify potential PSE Steering Group agenda items, and whether or not a meeting is required.

Status: Closed. The military departments reported to the Chairman that they had no issues. As a result, no PSESG is scheduled for June 1991.

VIII. ADJOURNMENT

The Chairman thanked everyone for their participation and work during the year. He stated that the next Executive Session would be held in late August - early September 1991. A summary of open action items is provided at Attachment I. There being no additional discussion, the Chairman adjourned the meeting.

Attachment A

Meeting Announcement and Agenda

OFFICE OF THE DIRECTOR OF
DEFENSE RESEARCH AND ENGINEERING

WASHINGTON, DC 20301

(P&R)

25 MAR 1991

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (RESEARCH, DEVELOPMENT, AND ACQUISITION)
ASSISTANT SECRETARY OF THE NAVY (RESEARCH, DEVELOPMENT AND ACQUISITION)
ASSISTANT SECRETARY OF THE AIR FORCE (ACQUISITION)
DIRECTOR, DEFENSE NUCLEAR AGENCY

SUBJECT: Annual Review of Physical Security Equipment (PSE) Programs

The Physical Security Equipment Action Group (PSEAG) will convene on 1 May 1991, at 0830 hrs, to review Service and Defense Nuclear Agency (DNA) physical security equipment programs. The Services and DNA are requested to present briefings on their current physical security systems R&D, procurement, and installation efforts. Briefings on R&D should include program and project description and status, schedule for completion, testing, and production planning (including estimated production costs and quantities). Briefings on procurement and installation programs should include project description and status, schedule, funding for FY 91-98, production quantities (based on joint Service requirements), and major installations/platforms initiated and/or completed during the past year. The Services should identify any R&D, procurement, or installation project problems which may delay or adversely affect their programs. DNA should brief their FY 91-98 exploratory development programs for physical security and indicate their relationship to the Services' 6.3/6.4 programs, when applicable. Services should be prepared to show the planned follow on R&D funding lines for those applicable DNA projects.

In addition to R&D, procurement and installation briefings, each of the Services and DNA are to present a briefing on the progress in implementing the Physical Security Equipment Portion, Appendix C, of the DoD Physical Security Master Plan (PSMP). Formats for the briefing viewgraphs were provided to PSEAG members in the minutes of the 27 February 1991, executive session.

The Army Product manager Physical Security Equipment (PM-PSE) has agreed to host this year's program review at Ft. Belvoir. The review will be held in the conference room of Building 392, BRDEC, Fort Belvoir, Virginia. The conference room has overhead projection equipment. Also, briefers shall provide

the Chairman, PSEAG with two complete copies of their briefing material.

Members of the Joint Service Requirements Working Group and the Security Equipment Integration Working Group are also invited to attend. Attendees should provide name, SSN, and clearance verification to Mr. Irwin S. Rosen, Deputy Product manager, BRDEC-AMCPM-PSE, Ft. Belvoir, VA, 22060-5606, (703) 664-2883/Autovon(DSN) 354-2883 with an info copy to Col David C. Evans, ODDDRE/P&R(ASPO), Pentagon, Washington, D.C., 20301-3100, (703) 695-9536/Autovon(DSN) 225-5936 by 22 April 1991.

H. Steven Kimmel
Deputy Director
Defense Research and Engineering
(Plans & Resources)

Attachments: Agenda

cc: DDRE (Strategic and Theater Nuclear Forces)
ATSD (Atomic Energy)
OASD (Special Operations/Low-Intensity Conflict)
Director, Security Plans and Programs, ODUSD(Security Policy)
Chairman, DoD Joint Service Requirements Working Group
Chairman, DoD Security Equipment Integration Working Group

AGENDA

Annual Review of Physical Security
Equipment Programs
1 May 1991

0830	Welcome, Admin Remarks, Introduction
0900	Army Programs - Research and Development - Procurement and Installations - DoD PSMP, Appendix C Implementation
0930	Break
0940	Navy Programs - Research and Development - Procurement and Installation - DoD PSMP, Appendix C Implementation
1010	Marine Corps Programs - Procurement and Installations - DoD PSMP, Appendix C Implementation
1030	Break
1040	Air Force Programs - Research and Development - Procurement and Installations - DoD PSMP, Appendix C Implementation
1110	Break
1120	- DNA 6.2 PSE Programs - DoD PSMP, Appendix C Implementation
1150	Lunch
1320	Additional Agenda Items
1420	Closing Comments
1430	Adjournment

Attachment B

Attendee List

ATTENDEES

NAME	MAILING ADDRESS	PHONE
Col Lee Carroll	ESD/AVJ Hanscom AFB, MA. 01731	COM: (617) 377-3993 AV: 478-3993
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NAME	MAILING ADDRESS	PHONE
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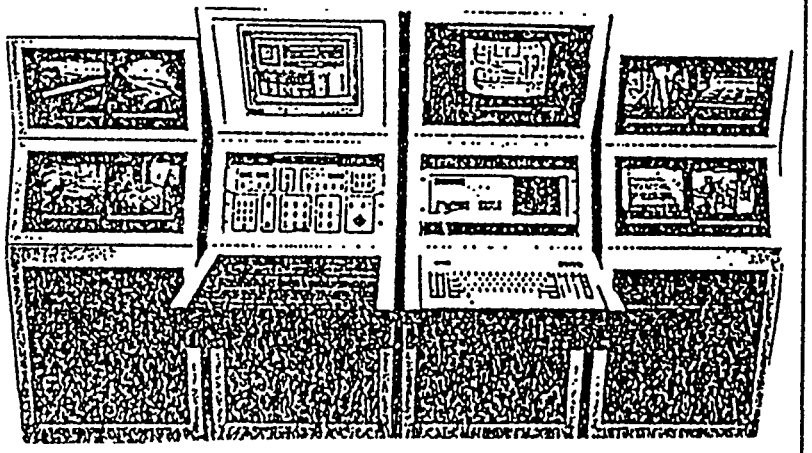
K. Velentlas	NISCOM/OP-O9N1, Code 24 Washington, DC	COM: 433-9144 AV: 288-9144 FAX: (202) 433-9079
Col. Frank M. Willingham	HQ DNA (OPNS) 6801 Telegraph Rd Alexandria, VA 22310-3398	COMM: (703) 325-7395 AV: 221-7395 (703) 325-2951
William J. Witter	HQ, DNA (NSNS) 6801 Telegraph Road Alexandria, VA 22310-3398	(703) 325-1002 AV: 221-1002 FAX: 325-2951

Attachment C
Army Presentation Charts

INTEGRATED COMMERCIAL INTRUSION DETECTION SYSTEM (ICIDS)



DESCRIPTION/OBJECTIVES

REQUIREMENTS DOC: MN, 1979/JSOR, 1989 DRAFT. THE ICIDS IS A REDIRECTED PROGRAM PURSUING A NONDEVELOPMENT ITEM ACQUISITION APPROACH PROVIDING A JOINT SERVICE SYSTEM PROTECTING HIGH DOLLAR AND CRITCAL DEFENSE ASSETS. THE ICIDS IS A HIGHLY SECURE STANDARDIZED INTRUSION DETECTION SYSTEM USING STATE-OF-THE-ART TECHNOLOGY. THIS PROGRAM REPLACES AGING AND OBSOLETE EQUIPMENT AND UPGRADES INSTALLATION SECURITY TO REQUIRED LEVELS WITHOUT A SIGNIFICANT INCREASE IN MANPOWER.

FUNDING

($K)

	90	91	92	93	94	95
RDTE	2214	1362	200			
OPA	5740	2159	11159	11167	12544	10096
QTY		2	6	6	7	5

GOVERNMENT/CONTRACTOR

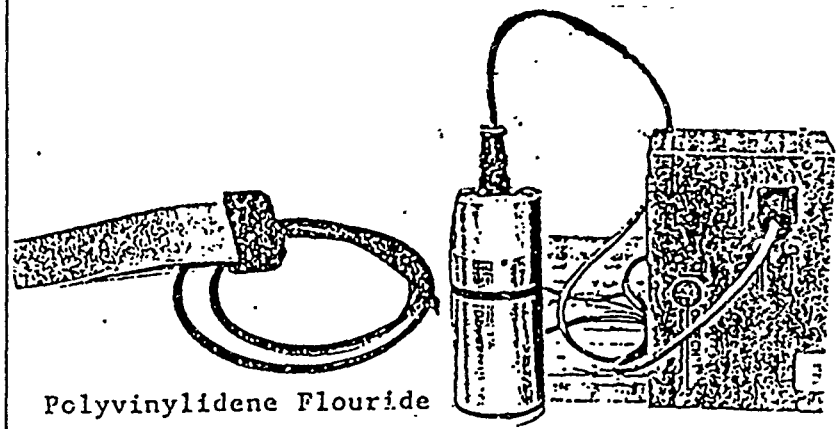
RDTE: BELVOIR RESEARCH DEVELOPMENT AND ENGINEERING CENTER

PROCUREMENT: TO BE DETERMINED

MAJOR MILESTONES

SPECIAL IPR REDIRECTION OF FIDS - MARKET INVESTIGATION	FY89
MILESTONE I/III IPR	FY90
TYPE CLASSIFICATION DECISION	FY90
CONTRACT AWARD 1ST GENERATION	FY91
FIRST UNIT EQUIPPED	FY92
EXPECTED UPGRADE/REBUY 1ST GENERATION	FY96

ADVANCED SENSORS (AS)



DESCRIPTION/OBJECTIVES

REQUIREMENTS DOC: MN, 1979/JSOR, 1989 DRAFT. AS WILL IMPROVE THE INTRUSION DETECTION SENSING CAPABILITY OF THE ICIDS BY PROVIDING TECHNOLOGICALLY MATURE SENSORS TO BE FIELDED IN GROUPS OVER ICIDS ENTIRE LIFE CYCLE. EMERGING TECHNOLOGIES INCLUDE POLYVINYLIDENE FLOURIDE, FIBER OPTICS, DUAL TECHNOLOGY, AND PRESENCE SENSORS. THESE SENSORS WILL PROVIDE THE ADVANCED CAPABILITY OF DETECTING UNAUTHORIZED ENTRY OR ATTEMPTED INTRUSION OF FACILITIES BY AN INCREASING SOPHISTICATED THREAT.

FUNDING

($K)

	90	91	92	93	94	95
PHASE I						
6.3	109	250	575			
6.4						
PHASE II						
6.3			870	613		
6.4					973	500
OPA						
AS I			INCL W/ICIDS I			
AS II			INCL W/ICIDS I U/R			

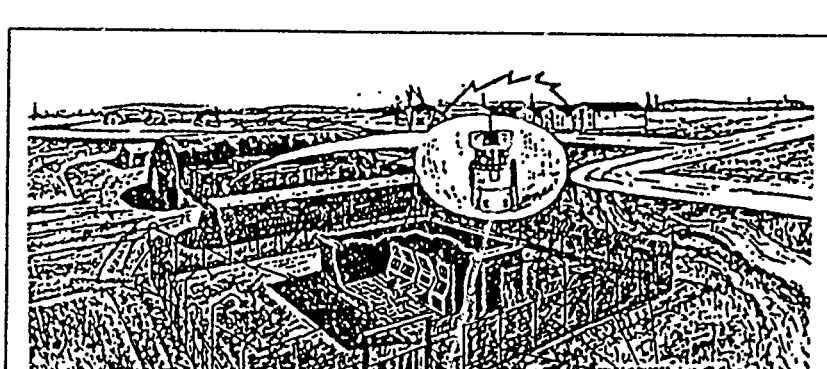
GOVERNMENT/CONTRACTOR

BELVOIR RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
USAMP SCHOOL

MAJOR MILESTONES

MARKET INVESTIGATION	FY89
PROOF OF PRINCIPLE MODELS AS-I	FY90-91
ENGINEERING CHANGE PROPOSAL	FY92
PRODUCTION AS-I w/ICIDS-I	FY92-96
PROOF OF PRINCIPLE MODELS AS-II	FY92-93
DEVELOPMENT PROVE-OUT DECISION	FY93
PRODUCTION PROVE-OUT MODELS	FY94-95
PRODUCTION DECISION	FY96

MOBILE DETECTION ASSESSMENT RESPONSE SYSTEM (MDARS)



DESCRIPTION/OBJECTIVES (INTERIOR)

REQUIREMENTS DOC: ROS 3 - INT O&O PLAN, 1985. THE MDARS PROGRAM WILL BE DEVELOPED IN THREE MAJOR PHASES, EACH PHASE PROVIDING AN INCREMENTAL UPGRADE OF THE SYSTEM. PHASE I AND II WILL BEGIN WITH INTERIOR MOBILE PLATFORMS AND EVOLVE TO EXTERIOR MOBILE PLATFORMS. PHASE II WILL ENHANCE PHASE I CAPABILITIES AND ADD THE REQUIREMENT FOR STATIC PLATFORMS CAPABLE OF EMPLOYING ACTIVE DELAY DEVICES AND NON-LETHAL RESPONSE TECHNOLOGIES. PHASE III WILL INTEGRATE ALL STATIC AND MOBILE PLATFORMS WITH INSTALLED IDS COMPONENTS INTO A SINGLE SYSTEM.

FUNDING

($K)

	91	92	93	94	95	96
RDTE						
PHASE I	3440	2710	2230	580		
PHASE II		1120	1320	1700	3050	1700
PHASE III						1250
OPA				(400)	(2950)	(750)
QTY				1	6-7	6-7

GOVERNMENT/CONTRACTOR

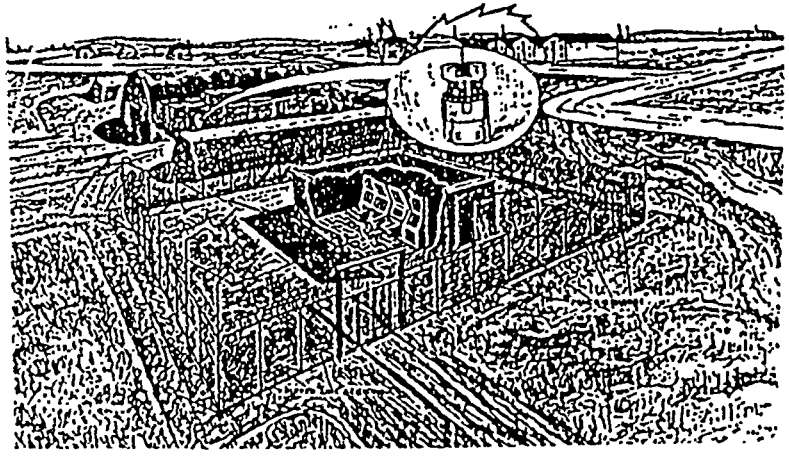
RDTE: US ARMY ARMAMENT MUNITIONS AND CHEMICAL COMMAND

PROCUREMENT: TO BE DETERMINED

MAJOR MILESTONES

MARKET INVESTIGATION - PHASE I	FY89
DEVELOPMENT PROVE-OUT DECISION	FY91
PRODUCTION DECISION PHASE I	FY93
PRODUCTION - PHASE I	FY94-95
PRODUCTION - PHASE II	FY97
PRODUCTION - PHASE III	FY00

MOBILE DETECTION ASSESSMENT RESPONSE SYSTEM (MDARS)



DESCRIPTION/OBJECTIVES (EXTERIOR)

REQUIREMENTS DOC: ROS 3 - INT O&O PLAN, 1985. THE MDARS PROGRAM WILL BE DEVELOPED IN THREE MAJOR PHASES, EACH PHASE PROVIDING AN INCREMENTAL UPGRADE OF THE SYSTEM. PHASE I AND II WILL BEGIN WITH INTERIOR MOBILE PLATFORMS AND EVOLVE TO EXTERIOR MOBILE PLATFORMS. PHASE II WILL ENHANCE PHASE I CAPABILITIES AND ADD THE REQUIREMENT FOR STATIC PLATFORMS CAPABLE OF EMPLOYING ACTIVE DELAY DEVICES AND NON-LETHAL RESPONSE TECHNOLOGIES. PHASE III WILL INTEGRATE ALL STATIC AND MOBILE PLATFORMS WITH INSTALLED IDS COMPONENTS INTO A SINGLE SYSTEM.

FUNDING

($K)

	91	92	93	94	95	96
RDTE						
PHASE I		1500	1500	1750	1655	
PHASE II						1500
OPA						(1000)
QTY						4

GOVERNMENT/CONTRACTOR

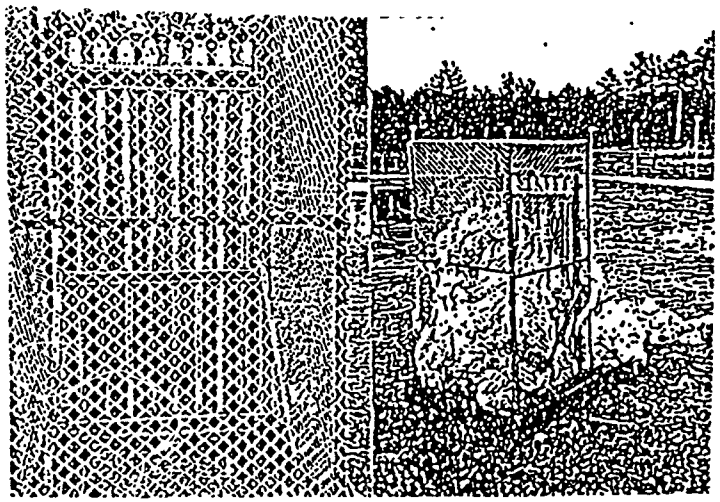
RDTE: US ARMY ARMAMENT MUNITIONS AND CHEMICAL COMMAND

PROCUREMENT: TO BE DETERMINED

MAJOR MILESTONES

TRANSITION FROM DNA	FY92
DEVELOPMENT PROVE-OUT DECISION	FY93
PRODUCTION DECISION PHASE I	FY95
PRODUCTION - PHASE I	FY96-98
PRODUCTION - PHASE II	FY00-02

STICKY FOAM DISPENSING SYSTEM (SFDS)



DESCRIPTION/OBJECTIVES

REQUIREMENTS DOC: WADS ROC, 1981
ACTIVE DENIAL JCOR, 1990 (DRAFT) SFDS SUPPORT THE ARMY NUCLEAR SECURITY PROGRAM BY SUPPLEMENTING THE WEAPONS ACCESS DELAY SYSTEM. THE BASIC COMPONENT IS THE COMMERCIALLY AVAILABLE NDI "STICKY FOAM". DEVELOPMENTAL EFFORTS CONCENTRATE ON NEW APPLICATIONS IN ALTERNATIVE OPERATIONAL EMPLOYMENT CONCEPTS. SFDS IS A MEANS TO UPGRADE SECURITY AGAINST ATTEMPTED INTRUSIONS INTO MAXIMUM SECURITY LEVEL FACILITIES.

FUNDING

($K)

	91	92	93	94	95	96
RDTE						
6.3	165					
6.4		950	250			
OPA			(750)	(3000)		
QTY			6	24		

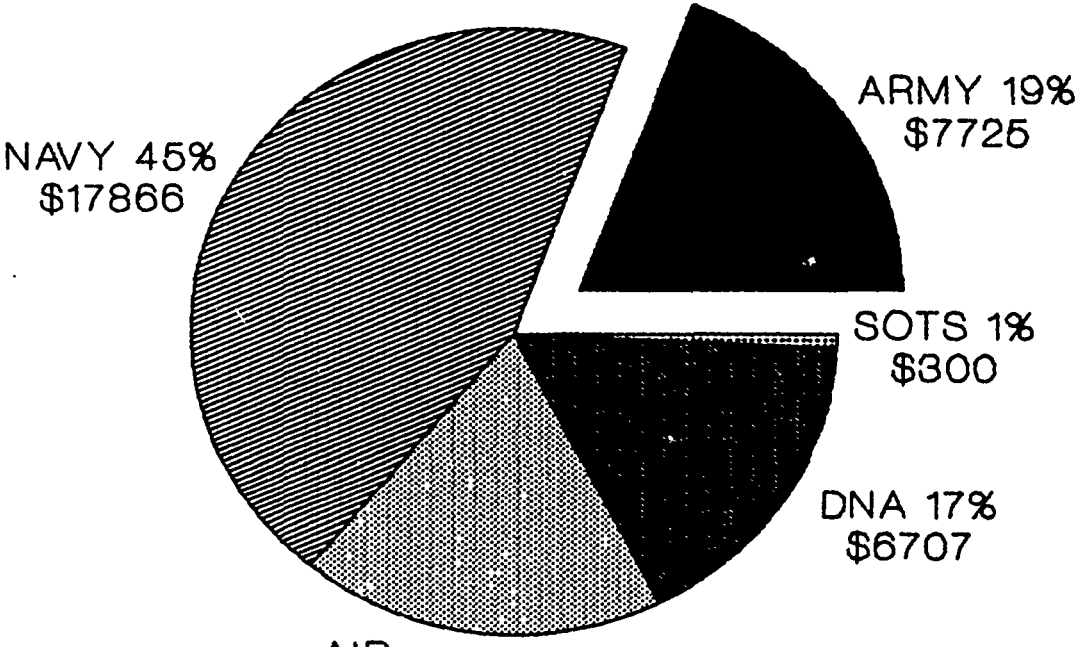
GOVERNMENT/CONTRACTOR

RDTE: ARMAMENT RESEARCH DEVELOPMENT & ENGINEERING CENTER

MAJOR MILESTONES

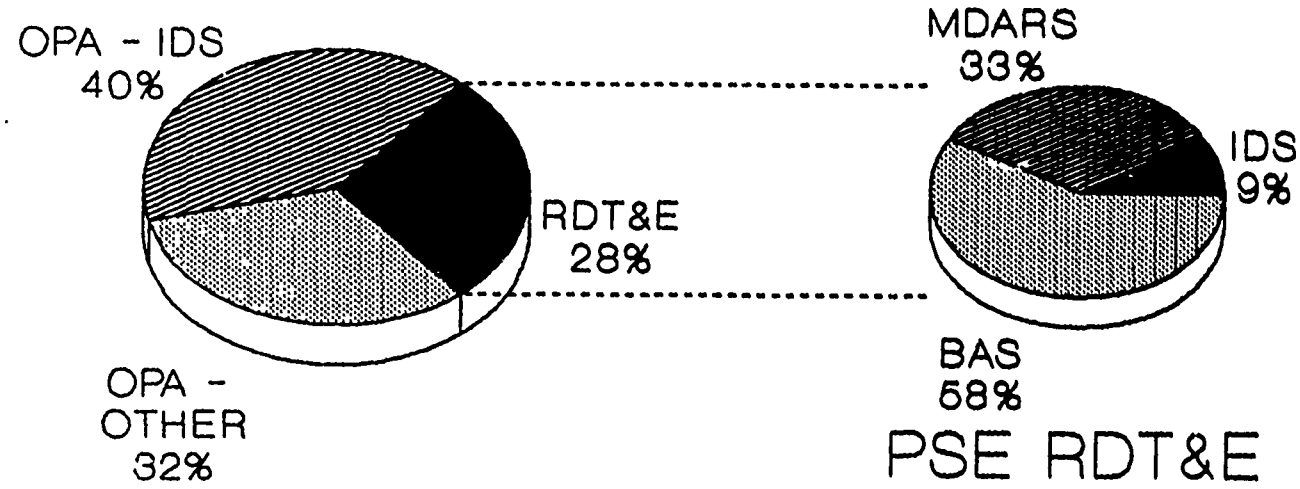
TRANSITION FROM DNA TO ARMY	FY90
PROOF OF PRINCIPLE	FY90-91
DEVELOPMENT PROVE-OUT DECISION	FY91-92
PROVE-OUT MODEL TESTING	FY92-93
PRODUCTION DECISION	FY93
PRODUCTION AWARD	FY93
FIRST ARTICLE TEST	FY93

DOD FY92 FUNDING

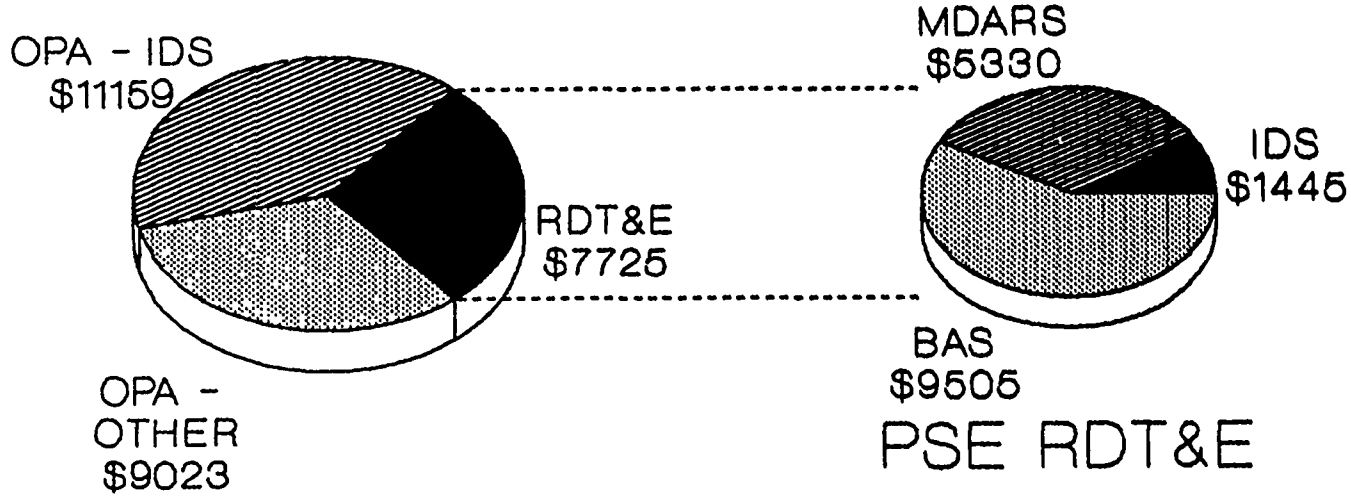


DOD PSE RDT&E

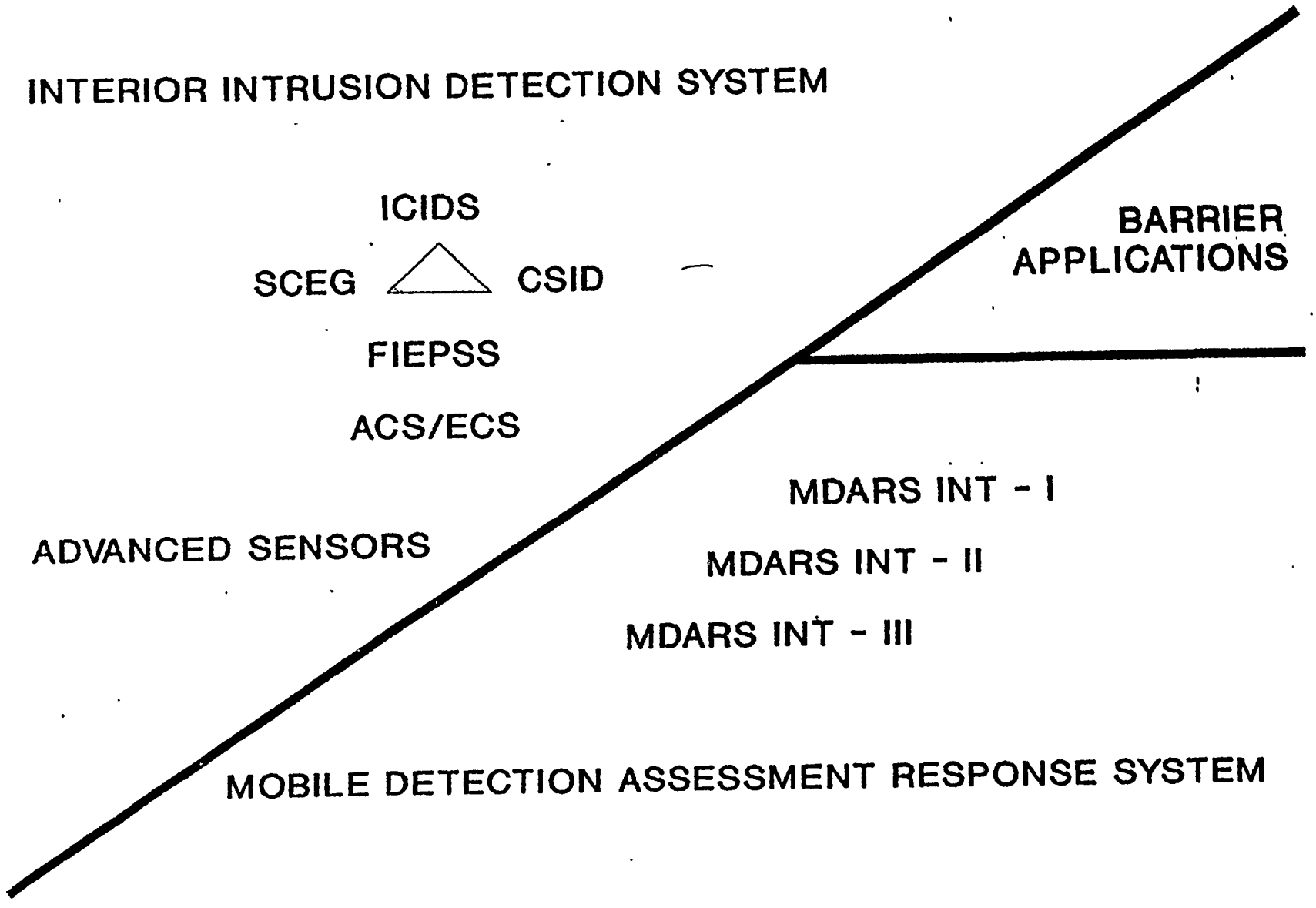
ARMY FY 92 FUNDING



ARMY FY 92 FUNDING

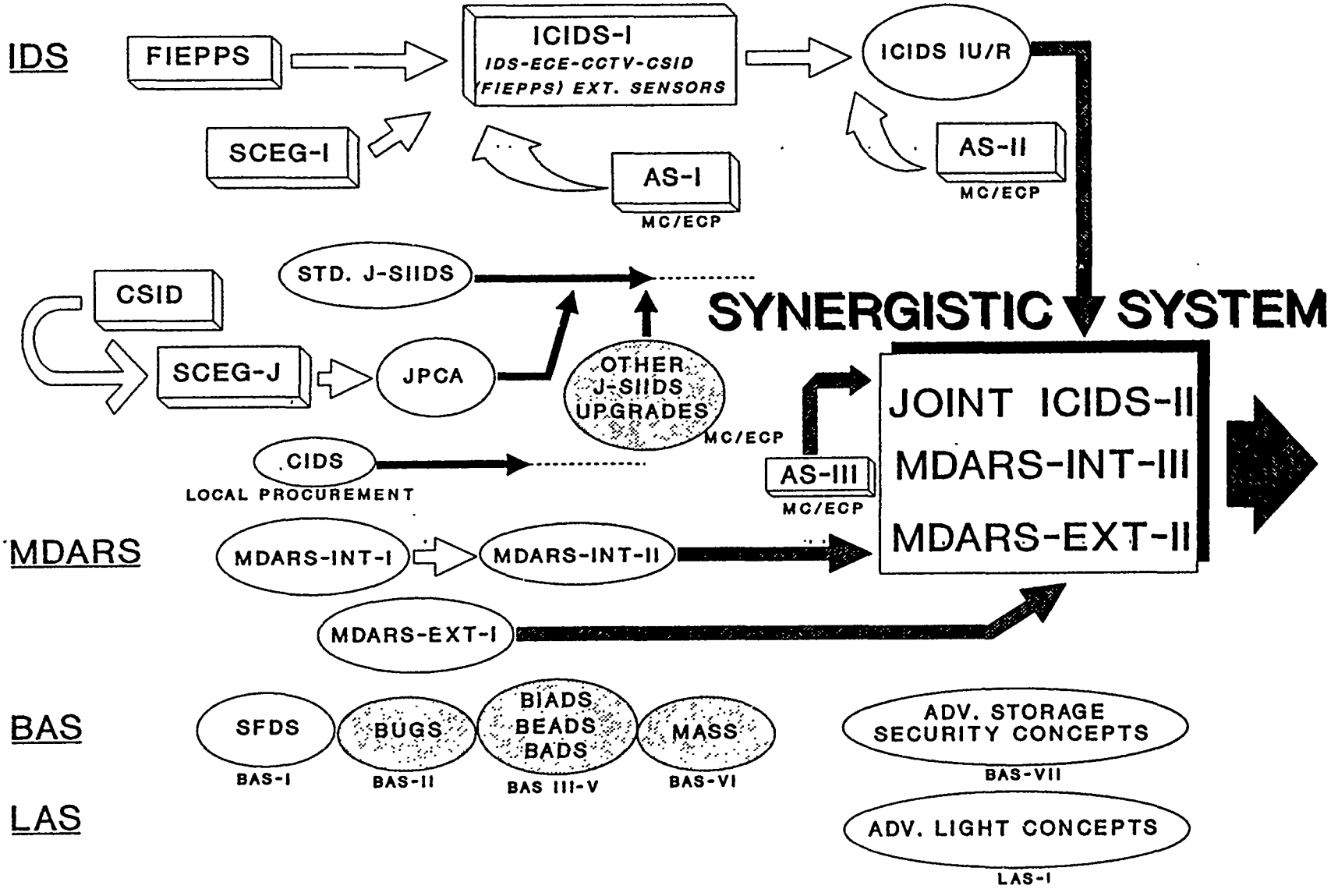


ARMY PSE FOCUS



PSE ROADMAP

FACILITY SECURITY EQUIPMENT



ARMY PSE RDT&E PROGRAMS

INTRUSION DETECTION SYSTEMS (IDS) PROGRAMS

ICIDS-I	INTEGRATED COMMERCIAL INTRUSION DETECTION SYSTEM - 1ST GENERATION (LIMITED DISTRIBUTION)
ICIDS-I U/R	INTEGRATED COMMERCIAL INTRUSION DETECTION SYSTEM - UPDATE AND/OR REBUY OF 1ST GENERATION
ICIDS-II	INTEGRATED COMMERCIAL INTRUSION DETECTION SYSTEM - 2ND GENERATION (JOINT)
SCEG-I	SMALL CONSOLE EQUIPMENT GROUP - ICIDS APPLICATION (SMALL PRIMARY MONITOR CONSOLE)
SCEG-J	SMALL CONSOLE EQUIPMENT GROUP - J-SIIDS APPLICATION (J-SIIDS PC ANNUNCIATOR)
CSID	COMMERCIAL SYSTEMS INTERFACE DEVICE - TYPE I (J-SIIDS INTERFACE) - TYPE II (BISS/COMMERCIAL IDS INTERFACE)
FIEPSS	FIXED INSTALLATION EXTERIOR PERIMETER SENSOR SYSTEM
AS-I	ADVANCED SENSORS - GROUP I (w/ICIDS-I)
AS-II	ADVANCED SENSORS - GROUP II (w/ICIDS-I U/R)
AS-III	ADVANCED SENSORS - GROUP III (w/ICIDS-II)

18 /04/90

ARMY PSE RDT&E PROGRAMS

MOBILE DETECTION ASSESSMENT RESPONSE SYSTEMS (MDARS)

MDARS-INT-I	MDARS INTERIOR - PHASE I (BARRIER/PRODUCT ASSESSMENT; PRE-PROGRAMMED/TELEOPERATED PATROL; STAND-ALONE ASSESSMENT TOOL)
MDARS-INT-II	MDARS INTERIOR - PHASE II (HUMAN INTRUSION DETECTION; AUTONOMOUS MOVEMENT TO ALARMS; OPERATOR-CONTROLLED NON-LETHAL RESPONSE DEVICES; ENTRY/INVENTORY CONTROL; INTEGRATION WITH FIXED IDS)
MDARS-INT-III	MDARS INTERIOR - PHASE III (RECOGNITION OF INTRUSION EVIDENCE; NAVIGATION VIA NATURAL LANDMARKS; HARDENED/DELAY INDUCING CAPABILITY; OPERATOR-CONTROLLED LETHAL RESPONSE DEVICE; MANIPULATOR ARM)
MDARS-EXT-I	MDARS EXTERIOR - PHASE I
MDARS-EXT-II	MDARS EXTERIOR - PHASE II

ARMY PSE RDT&E PROGRAMS

BARRIER APPLICATION SYSTEMS (BAS)

BAS-I STICKY FOAM DISPENSING SYSTEM (SFDS)

BAS-II BARRIERS FOR UNDERGROUND STORAGE (BUGS)
- FORCED ENTRY DENIAL SYSTEMS/
  - PERSONNEL BARRIER (FEDS/PB)
  - VEHICLE BARRIER (FEDS/VB)

(PENDING JRWG REVIEW)

BAS-III BARRIER - INTERIOR ACTIVE DENIAL SYSTEM (BIADS)
(PENDING ACTIVE DENIAL JSOR)

BAS-IV BARRIER - EXTERIOR ACTIVE DENIAL SYSTEM (BEADS)
(PENDING ACTIVE DENIAL JSOR)

BAS-V MAINTENANCE & ASSEMBLY SECURE STORAGE (MASS)
(PENDING JRWG REVIEW)

BAS-VI BARRIER - AERIAL DENIAL SYSTEM (BADS)
(PENDING ACTIVE DENIAL JSOR)

PHYSICAL SECURITY EQUIPMENT
ARMY RDT&E PROGRAMS
($ IN THOUSANDS)

CHART A

PROGRAMS	PREV	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. IDS										
6.3	616	300	1245	713	100	100	855	2500	2000	8429
6.4	6730	1932	200		973	500			1100	11435
2. MDARS										
6.3	3836	3440	2620	2820	1700		2750	3182		20348
6.4			2710	2330	2330	4705	1700		2400	16075
3. BAS										
6.3	354	361							500	1215
6.4			950	250						1200
SUBTOTALS										
6.3	4806	4101	3865	3533	1800	100	3605	5682	2500	29992
6.4	6730	1932	3860	2480	3303	5205	1700		3500	28710
GRAND TOTAL	11536	6033	7725	6013	5103	5305	5305	5682	6000	58702

PHYSICAL SECURITY EQUIPMENT
ARMY IDS RDT&E PROGRAMS

CHART B1

($ IN THOUSANDS)

PROJECTS	PREV	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. ICIDS I										
6.3										
6.4	3583	1362	200							5145
ICIDS II										
6.3			100	100	100	100	100	1600	2000	4100
6.4										
2. AS I										
6.3	349	250	575							1174
6.4										
AS II										
6.3			570	618						1188
6.4					973	500				1473
AS III										
6.3							755	900		1655
6.4									1100	1100

PHYSICAL SECURITY EQUIPMENT
ARMY IDS RDT&E PROGRAMS
($ IN THOUSANDS)

CHART B1

PROJECTS	PREV	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
3. SCEG I										
6.3										
6.4	1674									1674
SCEG J										
6.3										
6.4	724	520								1244
4. CSID										
6.3	267	50								317
6.4										
5. FIEPSS										
6.3										
6.4	749	50								799
SUBTOTALS										
6.3	616	300	1245	713	100	100	855	2500	2000	8429
6.4	6730	1932	200		973	500			1100	11435
GRAND TOTAL	7346	2232	1445	713	1073	600	855	2500	3100	19864

PHYSICAL SECURITY EQUIPMENT
ARMY MDARS RDT&E PROGRAMS

CHART B2

($ IN THOUSANDS)

PROJECTS	PREV	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. MDARS INT I										
6.3	3836	3440								7276
6.4			2710	2230	580					5520
MDARS INT II										
6.3			1120	1320	1700					4140
6.4						3050	1700			4750
MDARS INT III										
6.3							1250	1682		2932
6.4									900	900
2. MDARS EXT I										
6.3			1500	1500						3000
6.4					1750	1655				3405
MDARS EXT II										
6.3							1500	1500		3000
6.4									1500	1500
SUBTOTALS										
6.3	3836	3440	2620	2820	1700		2750	3182		20348
6.4			2710	2230	2330	4705	1700		2400	16075
GRAND TOTAL	3836	3440	5330	5050	4030	4705	4450	3182	2400	36423

PHYSICAL SECURITY EQUIPMENT
ARMY BARRIER APPLICATION SYSTEMS RDT&E PROGRAM
($ IN THOUSANDS)

CHART B3

PROJECTS	PREV	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. SFDS										
6.3	354	361								715
6.4			950	250						1200
2. BAS VII ADVANCED STORAGE CONCEPTS										
6.3									250	250
6.4										
2. LAS I ADVANCED LIGHTING CONCEPTS										
6.3									250	250
6.4										
SUBTOTALS										
6.3	354	361							500	1215
6.4			950	250						1200
GRAND TOTAL	354	361	950	250					500	2415

PHYSICAL SECURITY EQUIPMENT
ARMY PROCUREMENT
($ IN THOUSANDS)

CHART C

FUNDS REQUESTED
FUNDS BUDGETED

SYSTEM	UNINSTALLED SETS	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. ICIDS I										
SCEG I										
2. AS I					(INCL W/ICIDS I)					
AS II					(INCL W/ICIDS I U/R)					
3. MDARS	15				400	2950	750			4100
INT I					0	0	0			0
4. MDARS	14							500	3900	4400
INT II								0	0	0
5. MDARS	20									
INT III										

PHYSICAL SECURITY EQUIPMENT
ARMY PROCUREMENT

CHART C

($ IN THOUSANDS)

FUNDS REQUESTED
FUNDS BUDGETED

UNINSTALLED (CONTINUED)

SYSTEM	SETS	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
6. MDARS EXT I	24						1000	2500	2500	6000
							•	•	•	•
7. MDARS EXT II										
8. JSIDDS/CIDS (RJC6)		34730	15010	10643	8337	5770	64837	5070	4900	149297
CAPITAL CHANCE		450								
		3678	3822	3718	3599	0	•	•	•	•
9. JSIDDS/CIDS (VTER) SAFER		6389	3301	2726	2634	2499	4970	4845	5330	32694
		4940	5201	2726	2634	2499	2783	2714	2714	26211
TOTAL FUNDS		41569	18311	13369	11371	11219	83757	13615	16755	209966
		8618	9023	6444	6233	2499	•	•	•	•

PHYSICAL SECURITY EQUIPMENT
ARMY PROCUREMENT
($ IN THOUSANDS)

CHART D

FUNDS REQ
FUNDS BUDGETED

SYSTEM	NO. OF INSTALL	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. ICIDS I	21	2159	11159	11167	12544	10096				47125
SCEG I		2159	11159	11167	12544	10096				47125
2. ICIDS I	26						22000	22000	22000	66000
U/R							10479	10548	12714	33736
3. SFDS	30			750	8000					8750
TOTAL FUNDS	62	2159	11159	11917	15544	10096	22000	22000	22000	116875
		2159	11159	11167	12544	10096	10479	10548	12714	80861

PM-PSE R&D PRIORITIES

PROGRAM	FY 91	92	93	94	95	96	97	98
ICIDS-I	1	1	-	-	-	-	-	-
ICIDS-II	-	8	6	5	4	5	1	1
AS-I	5	4	-	-	-	-	-	-
AS-II	-	6	4	3	2	-	-	-
AS-III	-	-	-	-	-	2	2	2
MDARS-INT-I	3	2	1	1	-	-	-	-
MDARS-INT-II	-	3	2	2	1	1	-	-
MDARS-INT-III	-	-	-	-	-	3	3	3
MDARS-EXT-I	-	7	5	4	3	-	-	-
MDARS-EXT-II	-	-	-	-	-	4	4	4
BAS-I	7	5	3	-	-	-	-	-
BAS-VII	-	-	-	-	-	-	-	5
LAS-I	-	-	-	-	-	-	-	6

PM-PSE FY 92 RDT&E PRIORITIES

PRI	PGM	6.3	ICUM	6.4	ICUM	TOTAL
	($K'S)		3865		3868	7725
1.	ICIDS-I			200	3660	
2.	MDARS-INT-I			2710	950	
3.	MDARS-INT-II	1120	2745			
4.	AS-I	570	2175			
5.	BAS-I			950		
6.	AS-II	575	1600			
7.	MDARS-EXT-I	1500	100			
8.	ICIDS-II	100				

ARMY PSE RDT&E FUNDING STATUS
($ IN MILLIONS) (THROUGH 31 MARCH 91)

1.	FUNDS RECEIVED	FY 90 C/O	FY 91	TOTAL	
	A. OSD	0.260	5.223	5.483	
	B. OTHER	0	0	0	
	C. TOTAL	0.260	5.223	5.483	
2.	FUNDS OBLIGATED (THROUGH 31 MAR 91)				
	A. 6.3			3.059	
	B. 6.4			1.637	
	C. TOTAL			4.696	(86%)
3.	ADDITIONAL FUNDS REQUESTED/RECEIVED (3RD INCR)				
	A. 6.3		0.810	0.746	
	B. 6.4		0	0.037	
	C. 6.5		0.085	0.080	
	D. TOTAL		0.895	0.783	

Army Programs
Sorted by DOD Value

Program Name	DOD Value
ICIDS-I	80.42
AS-I	74.26
AS-II	73.09
MDARS-INT-I	64.89
BAS-I (SFDS)	63.12
ICIDS-II	61.59
MDARS-INT-II	54.05
MDARS-EXT-I	53.74

U.S. ARMY

DOD Physical Security Master Plan

Equipment Implementation (Appendix C)

	A # Required	B # Implemented	C # Not Implemented	D # At Issue
MANAGEMENT OPTIONS				
RDT&E Programs	12	12	0	0
Procurement Programs	3	3	0	0
SUMMARY ACTIONS	2	2	0	0
TOTAL	17	17	0	0

Implemented (of Column B)
Completely Implemented Items: 12
Overcome By Events Items: 5

Estimated Completion Dates (of Column C)
Not Applicable

U.S. ARMY
DOD Physical Security Master Plan
Equipment Implementation
Completely Implemented Items

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE
1. Integrated Commercial Intrusion Detection System (ICIDS)	1.1	C-1-1	a. Army Fielding Plan developed.	Dec 1989
			b. Air Force and Navy requirements identified.	Apr 1990
2. Small Console Equipment Group (SCEG)	1.2	C-1-2	a. Air Force and Navy requirements identified.	Apr 1990
			b. As program progressed, quantities identified. 40 each SCEG-I for 64-128 zones & 100 each SCEG-J (J-SIIDS upgrade) for 1-100 zones.	Apr 1991

U.S. ARMY

DOD Physical Security Master Plan

Equipment Implementation

Compliletely Implemented Items (Cont'd)

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE
3. Commercial System Interface Devices (CSID)	1.3	C-1-2	As program progressed, it became more defined & being merged with ICIDS. Most of the work, such as that resuled in SCEG-J, is complete. Program will terminate by the end of FY91.	Mar 1990
4. Advanced Sensors (AS)	1.4	C-1-2	Sensor technologies such as PVdF, VMD, TMD, FO & Dual Tech are identified. Coordination with DNA is on-going.	May 1989

U.S. ARMY

DOD Physical Security Master Plan

Equipment Implementation

Compllletely Implemented Items (Cont'd)

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE
5. Robotic Security Sensor System (ROS3)	1.6	C-1-3	a. Coordination with DNA is on-going. Program redefined Mobile Detection Assessment and Response System (MDARS). DNA RSS program will merge with MDARS in FY92.	Nov 1989
			b. Phases 1, 2 & 3 defined.	Jan 1990
			c. Formally submitted to JRWG. USAF deferred lead on Exterior MDARS to Army.	Jul 1990

U.S. ARMY

DOD Physical Security Master Plan

Equipment Implementation

Compllletely Implemented Items (Cont'd)

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE
6. Fixed Installation Exterior Perimeter Sensor System (FIEPSS)	1.7	C-1-4	Continuous coordination maintained with USAF since Aug 1989. All FIEPSS sensors are USAF developed. Program will merge with ICIDS-I and terminate by the end of FY91.	Aug 1989
7. Barrier Application System (BAS)	1.9	C-1-4	Program renamed as BAS-I, Sticky Foam Dispensing System (SFDS). Need validated & Advanced Development began in Jun 1990. No non-nuclear applications identified.	Jan 1990

U.S. ARMY

DOD Physical Security Master Plan

Equipment Implementation

Compiletely Implemented Items (Cont'd)

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE
8. Tactical Force Protection/SAFER Program	1.10	C-1-5	Close coordination with USAF and DNA on-going. Formal coordination mechanism within the JRWG established.	Apr 1991
9. Joint-Services Interior Intrusion Detections System (J-SIIDS)	1.12	C-1-6	Equipments are issued against priorities established by AR 190-13. To address product obsolescence materiel changes such as SCEG-J (known as JPCA) have been initiated.	Mar 1990

U.S. ARMY

DOD Physical Security Master Plan

Equipment Implementation

Compllletely Implemented Items (Cont'd)

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE
10. Chemical Demilitarization Facility Security System	1.15	C-1-6	Site Surveys identified specific security requirements and funding. All funding placed into FYDP. Implemented procedures regarding the use of non-standard PSE in the Army require consideration of the ICIDS in the facility construction.	Apr 1990
11. Establish Single PSE POC	Summary 1 Para 3.	C-1-7	ASA(RDA) appointed DCS DEA, HQ AMC, as the Army Executive Agent for PSE.	Oct 1989

U.S. ARMY

DOD Physical Security Master Plan

Equipment Implementation

Compliletely Implemented Items (Cont'd)

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE
12. Review and Baseline Army PSE Programs	Summary 2 Para 3.	C-1-7	Army PSEAG reviewed & prioritized Army PSE programs.	Apr 1990

U.S. ARMY

DOD Physical Security Master Plan

Equipment Implementation

Overcome By Events Items

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE OF DETERMINATION
1. Ported Coax Interior Senor (PINTS)	1.5	C-1-3	Program discontinued.	Oct 1989
2. Automated Entry Control System (AECS)	1.8	C-1-4	Program integrated with ICIDS. Close coordination with USAF programs being maintained.	Oct 1989
3. Survivability Overpack Containers (SOC)	1.11	C-1-5	Classified as a survivability product. Dropped from PSE programs. Transitioned to Army & 6.3 effort in progress.	Oct 1989

U.S. ARMY

DOD Physical Security Master Plan

Equipment Implementation

Overcome By Events Items (Cont'd)

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE OF DETERMINATION
4. Underground Storage Project	1.13	C-1-6	Program on hold, likely to be cancelled. RDT&E funds set aside reprogrammed.	Mar 1991
5. Maintenance and Assembly Secure Storage (MASS)	1.14	C-1-6	Program on hold. Statement of Need cancelled.	Feb 1991

Attachment D

Navy Presentation Charts

PHYSICAL SECURITY EQUIPMENT ACTION GROUP
1 MAY 1991

NAVY PHYSICAL SECURITY EQUIPMENT PROGRAMS

LEOPOLD L. TARGOSZ, JR.
CNO (OP-09N1)/NISCOM 24X24

OUTLINE

RDT&E
* WSS
* WASP
* SSA
* SPS
* PED
* PP

PROCUREMENT AND INSTALLATION
* NUCWPNS SECURITY (ASHORE)
* NUCWPNS SECURITY (AFLOAT)
* ESS INSTALLATIONS/UPGRADES
* MILCON IDS
* MAJOR CLAIMANTS

PHYSICAL SECURITY MASTER PLAN

PHYSICAL SECURITY EQUIPMENT
NAVY RDT&E PROGRAMS
($ IN MILLIONS)

CHART A

PROGRAMS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. WSS	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	7.000	5.200	-	-	-	-	-	12.200
2. WASP	(6.3)	-	3.066	3.680	2.917	200	-	-	9.863
	(6.4)	-	-	-	-	5.720	6.400	5.682	17.802
3. SSA	(6.3)	0.345	0.525	-	-	-	-	-	0.870
	(6.4)	3.355	2.675	-	-	-	-	-	6.030
4. SPS	(6.3)	2.700	2.296	2.485	0.800	0.500	-	-	8.781
	(6.4)	2.593	4.104	5.065	2.700	-	-	-	14.462
5. PED	-	-	-	-	-	-	-	-	-
6. PP	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	0.100	-	-	-	-	-	-	0.100
SUBTOTALS	(6.3)	3.045	5.887	6.165	3.7170	0.700	-	-	19.514
	(6.4)	13.048	11.979	5.065	2.700	5.720	6.400	5.682	50.594
GRAND TOTAL		16.093	17.866	11.230	6.417	6.420	6.400	5.682	70.108

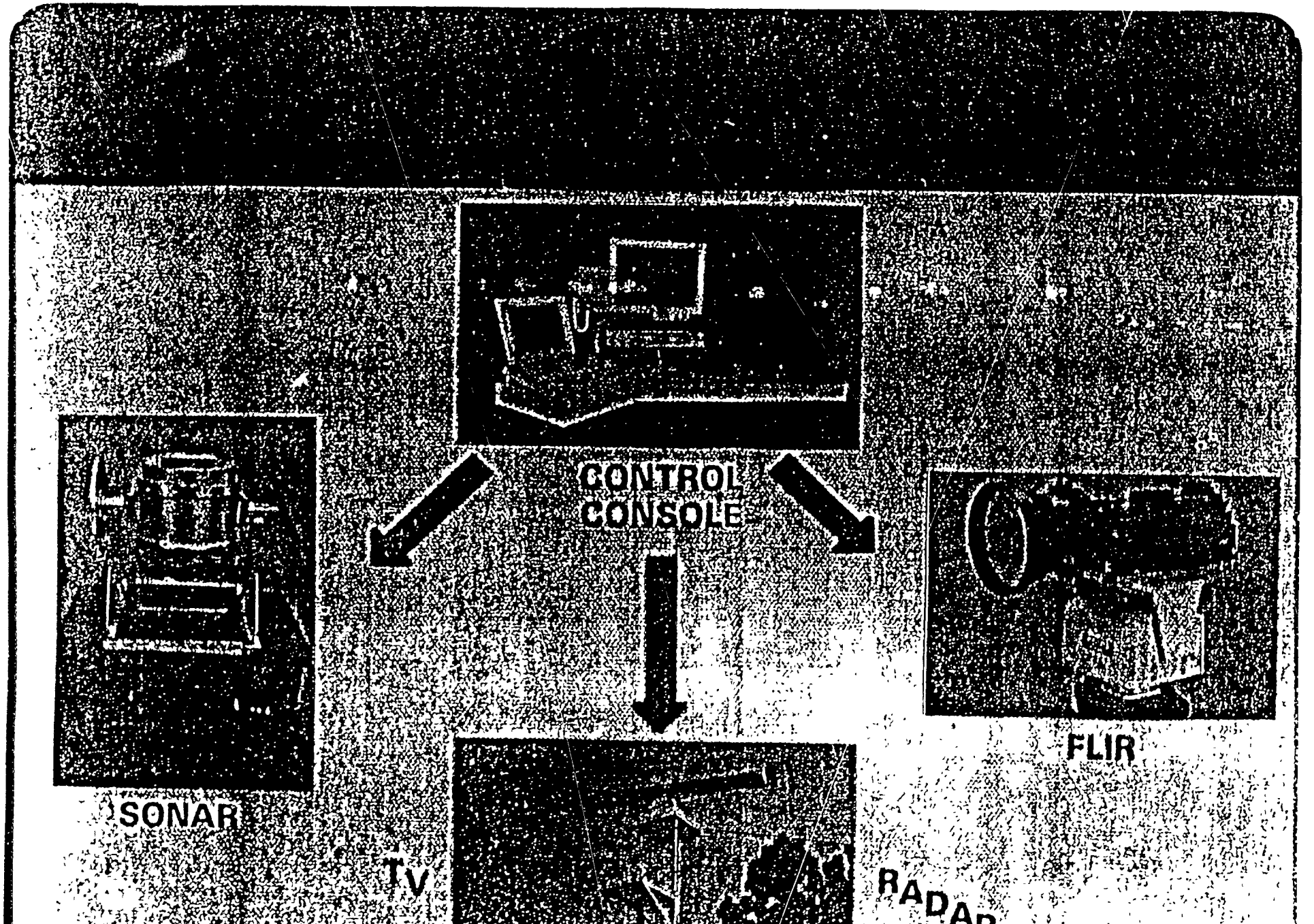
WSS = WATERSIDE SECURITY SYSTEM
WASP = WATERSIDE ADVANCED SECURITY PROGRAM
SSA = SECURE STRUCTURES ASHORE
SPS = SHIPBOARD PHYSICAL SECURITY
PED = PORTABLE EXPLOSIVE DETECTOR
PP = PRIORITIZATION PROGRAM

4.0M OF FY-92 FUNDS TRANSFERRED FROM WASP TO WSS.

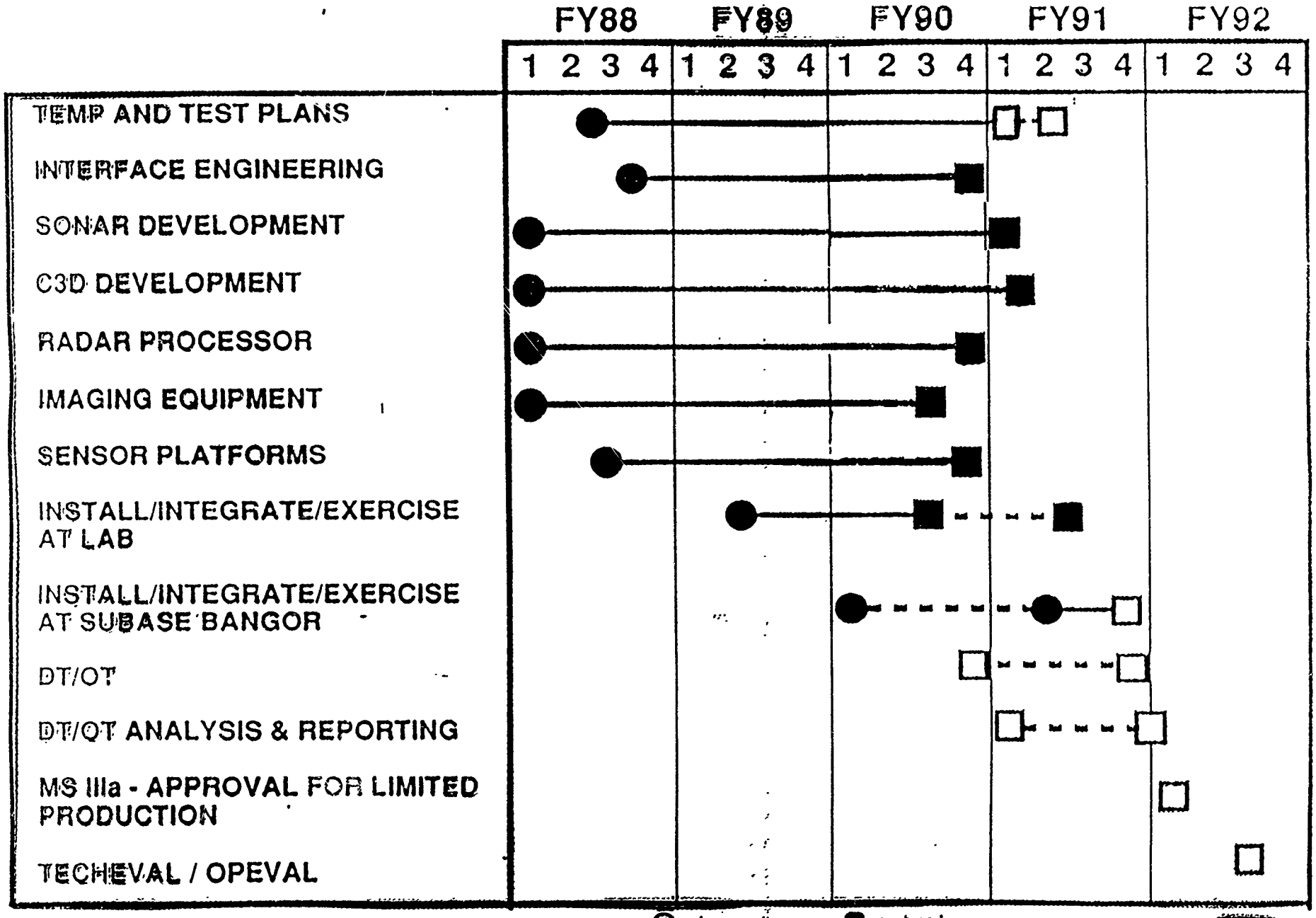
FY-98 FIGURES NOT AVAILABLE.

WATERSIDE SECURITY SYSTEMS (WSS) PROGRAM

* OR #214-09-87 (13 MAY 88)
* PROTECTS AGAINST INTRUSIONS THROUGH WATER BOUNDARIES
* MANDATED "DEMONSTRATION PROJECT"
* STREAMLINED RDT&E PROGRAM
  ** NDI AND TAILORED SCHEDULE
* ACAT-IVT DECISION (6 NOV 89)
* PROTOTYPE SYSTEM TESTING BEGUN MAR 91
* TECHEVAL AND OPEVAL IN FY-92


CONTROL CONSOLE
SONAR
FLIR
TV
RADAR

WATERSIDE SECURITY SYSTEM



PHYSICAL SECURITY EQUIPMENT
NAVY WATERSIDE SECURITY SYSTEM RDT&E PROGRAM
($ IN THOUSANDS)

CHART B

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. WSS	(6.3)	-	-	-	-	-	-	-	-
BASELINE	(6.4)	7000	5200	-	-	-	-	-	-
SUBTOTALS	(6.3)	7000	5200	-	-	-	-	-	12200
	(6.4)	-	-	-	-	-	-	-	-
GRAND TOTAL		7000	5200	-	-	-	-		12200

WSS = WATERSIDE SECURITY SYSTEM
$4.0M OF FY-92 TRANSFERRED FROM WATESIDE ADVANCED SECURITY PROGRAM (WASP)

WATERSIDE ADVANCED SECURITY PROGRAM (WASP)

TOR PROMULGATED (3 JUL 90)

WSS UPGRADE

** P3I

** EXPANDED CAPABILITIES

** 6.2 EFFORTS

FY-92 START-UP

PHYSICAL SECURITY EQUIPMENT
NAVY WATERSIDE ADVANCED SECURITY PROGRAM RDT&E
($ IN THOUSANDS)

CHART B

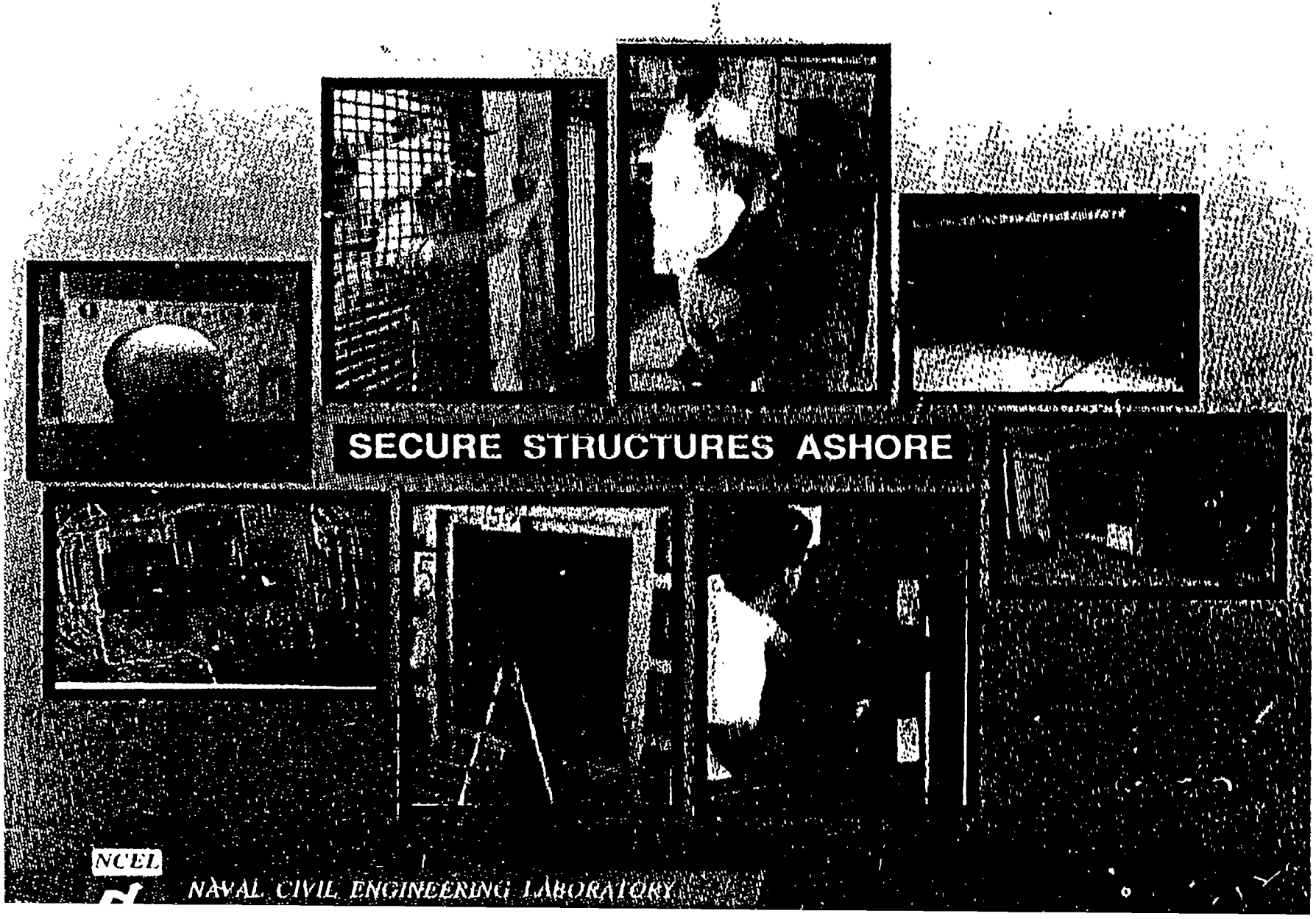
PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. LB*	(6.3)	-	-	1200	600	-	-	-	1800
	(6.4)	-	-	-	-	2000	500	-	2500
2. SI/MBS*	(6.3)	-	250	900	820	-	-	-	1970
	(6.4)	-	-	-	-	-	-	-	-
3. SWIDS*	(6.3)	-	-	-	200	200	-	-	400
	(6.4)	-	-	-	-	-	-	-	-
4. P3I/MU	(6.3)		2816	1580	1297	-	-	-	5693
	(6.4)	-	-	-	-	3720	5900	5682	15302
SUBTOTALS	(6.3)	-	3066	3680	2917	200	-	-	9863
	(6.4)	-	-	-	-	5720	6400	5682	17802
GRAND TOTAL		-	3066	3680	2917	5920	6400	5682	27665

LB = LIGHTWEIGHT BARRIER
SI/MBS = SWIMMER ID/MOVABLE BROADBAND SONAR
SWIDS = SHALLOW WATER INTRUSION DETECTION SYSTEM
P3I/MU = PREPLANNED PRODUCT IMPROVEMENT/MOBILE UNIT

* DNA EXPLORATORY DEVELOPMENT

SECURE STRUCTURES ASHORE (SSA) PROGRAM

* OR #098-09-88 (28 MAY 86)
* PREPARES STD DRAWINGS, MIL-SPECS, ETC., FOR 11 PRODUCTS
  ** ENHANCES STRUCTURAL COMPONENTS RESULTING IN ACCEPTABLE DELAY TIMES
* DEVELOPS COMPUTER MODELS
* INVESTIGATES/VALIDATES ADDITIONAL REQUIREMENTS


SECURE STRUCTURES ASHORE
NCEL
NAVAL CIVIL ENGINEERING LABORATORY

PHYSICAL SECURITY EQUIPMENT
NAVY SECURE STRUCTURES ASHORE RDT&E PROGRAM
($ IN THOUSANDS)

CHART B

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. MAGAZINE	(6.3)	-	-	-	-	-	-	-	-
DOORS	(6.4)	353	169	-	-	-	-	-	522
2. PERSONNEL	(6.3)	-	-	-	-	-	-	-	-
DOORS	(6.4)	291	100	-	-	-	-	-	391
3. WINDOW	(6.3)	-	-	-	-	-	-	-	-
BARRIERS	(6.4)	135	90	-	-	-	-	-	225
4. VEHICLE	(6.3)	-	-	-	-	-	-	-	-
BARRIERS	(6.4)	230	200	-	-	-	-	-	430
5. GLAZING	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	459	257	-	-	-	-	-	716
6. SAM	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	1400	1264	-	-	-	-	-	2664
7. LOCK	(6.3)	-	-	-	-	-	-	-	-
PROGRAM	(6.4)	400	260	-	-	-	-	-	660
8. ELECTRONIC	(6.3)	100	-	-	-	-	-	-	100
LOCKS	(6.4)	87	335	-	-	-	-	-	422
9. STAND-OFF	(6.3)	15	-	-	-	-	-	-	15
PROT*	(6.4)	-	-	-	-	-	-	-	-
10. POL PROT*	(6.3)	100	-	-	-	-	-	-	100
	(6.4)	-	-	-	-	-	-	-	-

SAM = SECURITY ASSESSMENT MODEL
* INITIATION DECISION PAPERS

PHYSICAL SECURITY EQUIPMENT
NAVY SECURE STRUCTURES ASHORE RDT&E PROGRAM
($ IN THOUSANDS)

CHART B

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
11. THREAT	(6.3)	20	124	-	-	-	-	-	144
MODELS	(6.4)	-	-	-	-	-	-	-	-
12. SECURITY	(6.3)	10	120	-	-	-	-	-	130
MAG BOLTWORK	(6.4)	-		-	-	-	-	-	-
13. UTILITY	(6.3)	10	131	-	-	-	-	-	141
SYSTEM*	(6.4)	-	-	-	-	-	-	-	-
14. TRANSPORT	(6.3)	10	140	-	-	-	-	-	150
PROT*	(6.4)	-	-	-	-	-	-	-	-
15. AIRCRAFT	(6.3)	80	10	-	-	-	-	-	90
PROT*	(6.4)	-	-	-	-	-	-	-	-
SUBTOTALS	(6.3)	345	525	-	-	-	-	-	870
	(6.4)	3355	2675	-	-	-	-	-	6030
GRAND TOTAL		3700	3200	-	-	-	-	-	6900

* INITIATION DECISION PAPERS

SHIPBOARD PHYSICAL SECURITY (SPS) PROGRAM

* TOR (25 FEB 85)
* OR (DRAFT) RESTRUCTURED
* PROTECTS CRITICAL AND HIGH PRIORITY AREAS OF ALL SHIPS
* PROVIDES DETECTION, DELAY AND RESPONSE CAPABILITIES/INFORMATION
* USES SNWS PRODUCTS
* EMPHASIZES NDI

PHYSICAL SECURITY EQUIPMENT
NAVY SHIPBOARD PHYSICAL SECURITY RDT&E PROGRAM
($ IN THOUSANDS)

CHART B

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. SUBMARINE	(6.3)	757	536	285	-	-	-	-	1578
SECRUITY	(6.4)	746	900	700	500	-	-	-	2846
2. SONIC	(6.3)	400	375	-	-	-	-	-	775
IDS	(6.4)	50	375	500	500	-	-	-	1425
3. VMD MK24	(6.3)	440	405	-	-	-	-	-	845
	(6.4)	-	425	415	400	-	-	-	1240
4. VCD	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	-	-	-	-	-	-	-	-
5. STS MK7	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	-	-	-	-	-	-	-	-
6. PA	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	318	400	350	350	-	-	-	1418
7. ILS	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	318	400	350	350	-	-	-	1418
8. SDS	(6.3)	730	400	400	-	-	-	-	1530
	(6.4)	50	614	780	-	-	-	-	1444
9. SECURITY FORCE EQUIPMENT	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	50	-	-	-	-	-	-	50
10. PMWS	(6.3)	-	-	1250	800	500	-	-	2550
	(6.4)	-	-	-	-	-	-	-	-

VMD MK24 = VIDEO MOTION DETECTION
VCD = VIDECO CAMERA DETECTION
STS MK7 = SURVEILLANCE TV SYSTEM
PA = PRODUCT ASSURANCE
PMWS = PASSIVE MILLIMETER WAVE SENSOR

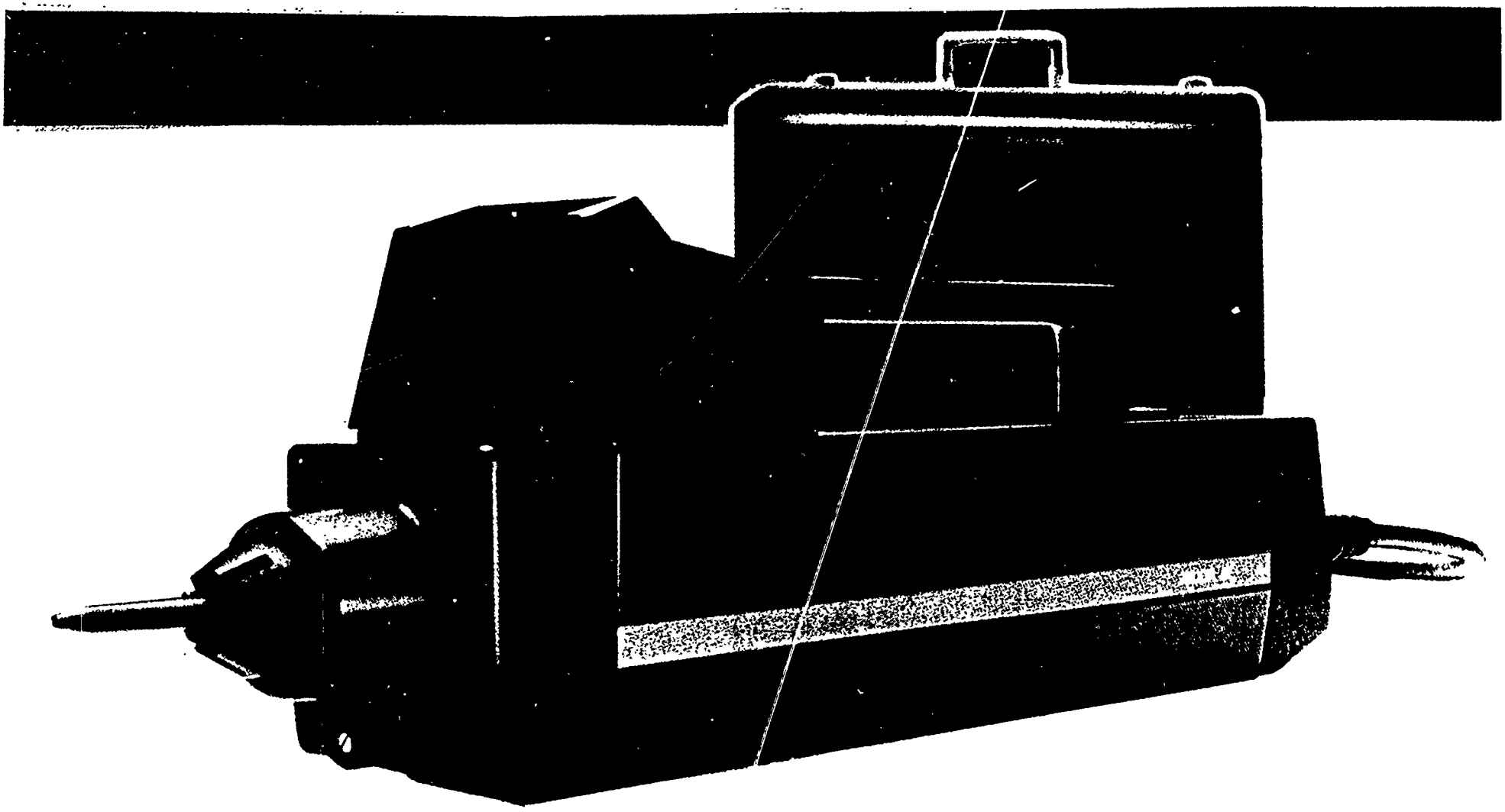
PHYSICAL SECURITY EQUIPMENT
NAVY SHIPBOARD PHYSICAL SECURITY RDT&E PROGRAM
($ IN THOUSANDS)

CHART B

PROJECTS (CONT'D)		FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
11. SURFACE SEARCH RADAR (NDI)	(6.3)	–	–	–	–	–	–	–	–
	(6.4)	50	–	–	–	–	–	–	50
12. AIR ALERF RADAR (NDI)	(6.3)	–	–	–	–	–	–	–	–
	(6.4)	50	120	–	–	–	–	–	170
13. HULL LIGHTS	(6.3)	–	–	–	–	–	–	–	–
	(6.4)	180	50	–	–	–	–	–	230
14. SHIP ACCESS CONTROL SYS.	(6.3)	100	–	–	–	–	–	–	100
	(6.4)	100	70	–	–	–	–	–	170
15. BISS/SPS/ WSS INTERFACE	(6.3)	–	–	–	–	–	–	–	–
	(6.4)	25	–	–	–	–	–	–	25
16. FZ UPGRADE	(6.3)	173	300	300	–	–	–	–	773
	(6.4)	425	610	1105	350	–	–	–	2490
17. EXTENDED SECTY NETWORK	(6.3)	100	280	250	–	–	–	–	630
	(6.4)	112	140	865	250	–	–	–	1367
18. MSS MK-1 T & E	(6.3)	–	–	–	–	–	–	–	–
	(6.4)	119	–	–	–	–	–	–	119
SUBTOTALS	(6.3)	2700	2296	2485	800	500	–	–	8781
	(6.4)	2593	4104	5065	2700	–	–	–	14462
GRAND TOTAL		5293	6400	7550	3500	500	–	–	23243

PORTABLE EXPLOSIVE DETECTOR (PED) PROGRAM

* DRAFT JSOR (OCT 89)
* PROVIDES SECURITY PERSONNEL WITH DETECTION CAPABILITY
* NAVEODTECHCEN TESTS NDI FOR NEAR-TERM USE
* JRWG WITHDRAWS JSOR
* CURRENT STRATEGY – MONITOR PRIVATE SECTOR/ACADEMIA/GOVERNMENT AGENCIES
* SEIWG REP ON IACSE SUBCOMMITTEE



PRIORITIZATION EFFORT

* C, PSEAG INITIATIVE
* JRWG TASK
  ** COMPUTER PROGRAM
  ** REFINEMENT COMPLETED

PHYSICAL SECURITY EQUIPMENT
DOD (NAVY) RDT&E PRIORITIZATION PROGRAM
($ IN THOUSANDS)

CHART B

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. PP	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	100	-	-	-	-	-	-	100
SUBTOTALS	(6.3)	-	-	-	-	-	-	-	-
	(6.4)	100	-	-	-	-	-	-	100
GRAND TOTAL		100	-	-	-	-	-	-	100

PP = PRIORITIZATION PROGRAM

NAVY

PHYSICAL SECURITY EQUIPMENT

RDT&E PRIORITIZATION

RANK	PROGRAM NAME	VALUE
1	WATERSIDE SECURITY SYSTEM (WSS)	64.70
2	WATERSIDE ADVANCED SECURITY PROGRAM (WASP)	56.29
3	SECURE STRUCTURES ASHORE (SSA)	55.79
4	SHIPBOARD PHYSICAL SECURITY (SPS)	52.31
5	PORTABLE EXPLOSIVE DETECTOR (PED)	45.10
6	PRIORITIZATION PROGRAM (PP)	32.04

DON PHYSICAL SECURITY EQUIPMENT RDT&E
ESTIMATED 6.2 - 6.3 TRANSITION SCHEDULE

($ IN THOUSANDS)

	FY-92	FY-93	FY-94	FY-95	FY-96
LIGHTWEIGHT BARRIER		△ 1200	600		
PASSIVE MILLIMETER WAVE SENSOR		△ 1250	800	500	
SWIMMER IDENTIFICATION / MBS	△ 250	900	820		
SHALLOW WATER INTRUSION DETECTION SYSTEM			△ 200	200	
△ = 6.4 ESTIMATED TRANSITION					
TOTAL	250	3350	2420	700	

DDONPSE

FY-91 OBLIGATION RATES
(1st and 2nd Increments)
($ In Thousands)

PROGRAM	TOTAL 1st & 2nd Increments	OBLIGATED	RATE
WSS	5,920	5,328	90%
SPS	4,484	4,035	90%
SSA	3,100	2,945	95%
PP	100	100	100%
TOTAL:	13,604	12,408	91%

Actual third increment of RDT&E funding has not been received.

Per PHONECON with Colonel Evans, 29 April 1991, the third increment is $2,249K, a reduction of $240K. Consequently, the **actual** FY-91 funding for Navy RDT&E will be $15,853K. This represents an overall reduction of $443K from the projected $16,296K control.

As of May 91, and based on the $15,853K (actual total FY-91 funding), the Navy's obligation rate for FY-91 is 78.2%.

PHYSICAL SECURITY EQUIPMENT
NAVY PROCUREMENT AND INSTALLATION
NUCWPNS SECURITY (ASHORE)
($ IN MILLIONS)

CHART C

TYPE OF EQUIPMENT/ SYSTEM	NUMBER OF SETS	COST/BUDGETED FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. APC	42	0.5/0.5	1.0/1.0	2.2/2.2	2.2/2.2	1.4/1.4	1.5/1.5	-	8.8
2. ALT	29	2.2/2.2	1.6/1.6	1.6/1.6	1.6/1.6	1.6/1.6	1.6/1.6	-	10.2
3. ORDCOM	16	1.4/1.4	-	1.6/1.6	1.6/1.6	0.6/0.6	1.5/1.5	0.1/0.1	6.8
TOTAL FUNDS:		4.1/4.1	2.6/2.6	5.4/5.4	5.4/5.4	3.6/3.6	4.6/4.6	0.1/0.1	25.8

APC = ARMORED PERSONNEL CARRIER
ALT = ARMORED LOGISTIC TRANSPORT
ORDCOM = ORDNANCE COMMUNICATION

PHYSICAL SECURITY EQUIPMENT
NAVY PROCUREMENT AND INSTALLATION
NUCLEAR SECURITY (ASHORE)
($ IN MILLIONS)

CHART D

TYPE OF EQUIPMENT/ PSE SYSTEMS	NUMBER OF INSTALLATION/ PLATFORMS	FUNDS REQUIRED/FUNDS BUDGETED FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. APC	16	1.1/0.5	2.1/1.0	3.1/2.2	3.1/2.2	3.1/1.4	3.1/1.5	3.1/0	18.7/ 8.8
2. ALT	16	2.2/2.2	3.2/1.6	3.2/1.6	3.2/1.6	3.2/1.6	3.2/1.6	3.2/0	21.4/10.2
3. ORDCOM	16	1.4/1.4	-	1.6/1.6	1.6/1.6	1.6/0.6	1.6/1.5	1.6/0.1	9.4/ 6.8
TOTAL FUNDS:		4.7/4.1	5.3/2.6	7.9/5.4	7.9/5.4	7.9/3.6	7.9/4.6	7.9/0.1	49.5/25.8

APC = ARMORED PERSONNEL CARRIER
ALT = ARMORED LOGISTIC TRANSPORT
ORDCOM = ORDNANCE COMMUNICATION

PHYSICAL SECURITY EQUIPMENT
NAVY PROCUREMENT AND INSTALLATION
NUCWPNS SECURITY (AFLOAT)
($ IN MILLIONS)

CHART C

TYPE OF EQUIPMENT/ SYSTEM	NUMBER OF SETS	COST/BUDGETED FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. PVPCS MK4	174	6.0/6.0	6.7/6.7	4.2/4.2	2.2/2.2	1.5/1.5	-	-	20.6/20.6
2. MSS MK1	80	-	0.9/0.9	0.5/0.5	2.0/2.0	2.7/2.7	3.2/3.2	-	9.3/ 9.3
TOTAL FUNDS:		6.0/6.0	7.6/7.6	4.7/4.7	4.2/4.2	4.2/4.2	3.2/3.2	-	29.9/29.9

PVPCS = PROTECTED VOICE PORTABLE COMMUNICATION SYSTEM
MSS = MAGAZINE SECURITY SYSTEM

PHYSICAL SECURITY EQUIPMENT
NAVY PROCUREMENT AND INSTALLATION
NUCWPNS SECURITY (AFLOAT)
($ IN MILLIONS)

CHART D

TYPE OF EQUIPMENT/ PSE SYSTEMS	NUMBER OF INSTALLATION/ PLATFORMS	FUNDS REQUIRED/FUNDS BUDGETED FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. PVPCS MK4	174	10.3/6.0	6.0/6.7	1.4/4.2	2.2/2.2	0/1.5	-	-	21.9/20.6
2. MSS MK1	66	-	3.6/0.9	4.3/0.5	2.2/2.0	7.1/2.7	6.7/3.2	6.7/0	30.6/ 9.3
TOTAL FUNDS:		10.3/6.0	9.6/7.6	5.7/4.7	4.4/4.2	9.1/4.2	6.7/3.2	6.7/0	52.5/29.9

PVPCS = PROTECTED VOICE PORTABLE COMMUNICATION SYSTEM
MSS = MAGAZINE SECURITY SYSTEM

PHYSICAL SECURITY EQUIPMENT
NAVY PROCUREMENT AND INSTALLATION
ELECTRONIC SECURITY SYSTEMS
($ IN MILLIONS)

CHART

TYPE OF EQUIPMENT/ SYSTEM	NUMBER OF SETS	COST/BUDGETED FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. SAS	9	6.9/6.9	3.4/3.4	5.1/5.1	5.5/5.5	5.7/5.7	5.9/5.9	6.2/6.2	38.7/38.7
2. RA	15	3.5/3.5	2.2/2.2	4.7/4.7	6.0/6.0	6.0/6.0	2.0/2.0	1.0/1.0	25.4/25.4
3. AA&E	38	1.2/1.2	1.9/1.9	2.2/2.2	3.3/3.3	3.4/3.4	3.5/3.5	3.6/3.6	19.1/19.1
4. WSS	7	0.9/0.9	5.5/5.5	8.4/8.4	7.1/7.1	8.6/8.6	15.0/15.0	3.0/3.0	48.5/48.5
5. HARBORLIGHT	2	0.3/0.3	2.1/2.1	1.8/1.8	1.2/1.2	1.3/1.3	1.7/1.7	1.9/1.9	10.3/10.3
TOTAL FUNDS:		12.8/12.8	15.1/15.1	22.2/22.2	23.1/23.1	25.0/25.0	28.1/28.1	15.7/15.7	142.0/142.0

SAS = SPECIAL AMMUNITION STORAGE
RA = READINESS ASSETS
AA&E = ARMS, AMMUNITION AND EXPLOSIVES
WSS = WATERSIDE SECURITY SYSTEM PROGRAM

FY-98 FIGURES NOT AVAILABLE

PHYSICAL SECURITY EQUIPMENT
NAVY PROCUREMENT AND INSTALLATIONS
ELECTRONIC SECURITY SYSTEMS
($ IN MILLIONS)

CHART D

FUNDS REQUIRED/FUNDS BUDGETED

TYPE OF EQUIPMENT/ SYSTEM	NUMBER OF INSTALLATION	FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. SAS	9	6.9/6.9	3.4/3.4	5.1/5.1	5.5/5.5	5.7/5.7	5.9/5.9	6.2/6.2	38.7/38.7
2. RA	15	3.5/3.5	2.2/2.2	4.7/4.7	6.0/6.0	6.0/6.0	2.0/2.0	1.0/1.0	25.4/25.4
3. AA&E	38	1.2/1.2	1.9/1.9	2.2/2.2	3.3/3.3	3.4/3.4	3.5/3.5	3.6/3.6	19.1/19.1
4. WSS	7	3.6/0.9	12.5/5.5	11.3/8.4	11.7/7.1	11.9/8.6	18.9/15.0	14.0/3.0	83.9/48.5
5. HARBORLIGHT	2	0.3/0.3	2.1/2.1	1.8/1.8	1.2/1.2	1.3/1.3	1.7/1.7	1.9/1.9	10.3/10.3
TOTAL FUNDS:		15.5/12.8	22.1/15.1	25.1/22.2	27.7/23.1	28.3/25.0	32.0/28.1	26.7/15.7	177.4/142.0

SAS = SPECIAL AMMUNITION STORAGE
RA = READINESS ASSETS
AA&E = ARMS, AMMUNITION AND EXPLOSIVES
WSS = WATERSIDE SECURITY SYSTEM PROGRAM

FY-98 FIGURES NOT AVAILABLE.

PHYSICAL SECURITY EQUIPMENT
NAVY PROCUREMENT AND INSTALLATIONS
MILCON IDS
($ IN MILLIONS)

CHART C

TYPE OF EQUIPMENT/ PSE SYSTEMS	NUMBER OF SETS	COST/BUDGETED FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. MILCON IDS	224	1.6/0.0	4.2/4.2	5.3/5.3	2.6/2.6	1.9/1.9	4.7/4.7	2.8/2.8	23.1/21.5
TOTAL FUNDS:		1.6/0.0	4.2/4.2	5.3/5.3	2.6/2.6	1.9/1.9	4.7/4.7	2.8/2.8	23.1/21.5

PHYSICAL SECURITY EQUIPMENT
NAVY PROCUREMENT AND INSTALLATIONS
MILCON IDS
($ IN MILLIONS)

CHART

TYPE OF EQUIPMENT/ PSE SYSTEMS	NUMBER OF BUILDINGS	FUNDS REQUIRED/FUNDS BUDGETED FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. MILCON IDS	224	1.6/0.0	4.2/4.2	5.3/5.3	2.6/2.6	1.9/1.9	4.7/4.7	2.8/2.8	23.1/21.5
TOTAL FUNDS:		1.6/0.0	4.2/4.2	5.3/5.3	2.6/2.6	1.9/1.9	4.7/4.7	2.8/2.8	23.1/21.5

PHYSICAL SECURITY EQUIPMENT
NAVY PROCUREMENT AND INSTALLATION
MAJOR CLAIMANTS
($ IN THOUSANDS)

CHART C/D

	BUDGETED							
COMMAND	FY91	FY92	FY93	FY94	FY95	FY96	FY97	SUBTOTAL
1. CNO (OP-09BF)	86	–	390	172	–	244	–	892
2. MEDCOM	–	96	–	–	–	–	–	96
3. NAVAIR	–	–	–	–	–	–	–	–
4. NAVSUP	–	–	–	–	–	–	–	–
5. SSPO	–	–	–	–	–	–	–	–
6. SPAWAR	–	–	–	–	–	–	–	–
7. LANTFLT	826	386	168	204	300	300	200	2384
8. NAVEUR	–	250	500	550	200	500	100	2100
9. CNET	–	810	–	–	–	–	–	810
10. NAVTELCOM	–	199	92	255	–	300	200	1046
11. NAVOCEAN	–	–	–	–	–	–	–	–
12. PACFLT	406	770	325	888	300	1000	1001	4690
13. NAVRESFOR	156	–	–	–	–	–	–	156
TOTAL FUNDS:	1474	2511	1475	2069	800	2344	1501	12174

PHYSICAL SECURITY EQUIPMENT
NAVY
OPERATIONS AND MAINTENANCE
($ IN MILLIONS)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97
SNWS ISEA							
PVPCS MK	.5	1.1	.8	.4	.4	.4	.4
MSS MK1	-	.6	.7	1.2	1.2	1.3	1.3
ESS	3.0	5.0	5.0	5.0	5.0	5.0	5.0
LOCK PROGRAM	.9	.9	1.0	1.0	.9	.8	.8
TOTAL FUNDS	4.4	7.6	7.5	7.6	7.1	7.1	7.1

NAVY

DoD Physical Security Master Plan
Equipment Implementation

	A # Required	B # Implemented	C # Not Implemented	D # At Issue
MANAGEMENT OPTIONS				
RDT&E Programs	5	5		
Procurement Programs	6	6		
SUMMARY ACTIONS				
TOTAL	11	11		

Estimated Completion Dates (of Column C)

50% Completion Date _____

75% Completion Date _____

100% Completion Date _____

Note: Columns B + C + D = A

NAVY

DOD PHYSICAL SECURITY MASTER PLAN

EQUIPMENT IMPLEMENTATION

COMPLETELY IMPLEMENTED ITEMS

	SHORT TITLE	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE
1.	WSS	2.1.1	C-2-1	FUNDING PROGRAMMED	THRU FY-97
2.	SPS	2.1.2	C-2-1	RESTRUCTURED (INCL SNWS)	THRU FY-94
3.	SNWS	2.1.3	C-2-2	COMBINED UNDER SPS	OCT 90
4.	PED	2.1.4	C-2-2	JRWG DECISION; IACSE REP	JAN 90
5.	SSA	2.1.5	C-2-3	FUNDING PROGRAMMED	THRU FY-92
6.	WSS	2.2.1	C-2-3	FUNDING SUPPORT	ONGOING
7.	SPS	2.2.2	C-2-4	MINIMAL SUPPORT	ONGOING
8.	SNWS	2.2.3	C-2-4	FUNDING PRIORITY	ONGOING
9.	PED	2.2.4	C-2-4	HIGH VISIBILITY EFFORT	ONGOING
10.	SSA	2.2.5	C-2-5	NON-ACAT	NA
11.	PERS & COMD SUPPORT	2.2.6	C-2-5	A-D GUIDE FOR OPN DISTRIBUTION	ONGOING

RDT&E

WATERSIDE SECURITY SYSTEM (WSS)

GENERAL DESCRIPTION: The WSS program received renewed impetus due to Congressional interest in the mid 80s over security at critical naval facilities. This interest was reflected in FY 88-92 Defense Guidance which required deployment of waterside security systems at strategic submarine bases. The WSS will provide a level of protection currently unavailable against intrusions through the water boundaries of Department of Defense installations. The WSS will detect targets, classify and localize threats, assess intrusions, and communicate necessary information to a user friendly command, control, and communication display (C3D). The system's major components will include a fully integrated C3D, sonars for swimmer dtection, radars for fast boat and sneak craft deteciton, CCTV and FLIR for surface assessment.

STATUS AND SCHEDULE: During March 1991, the WSS underwent integrated testing (DT-IIA) at Kaneohe Bay, HI with very encouraging results. Sonars and radars meet all requirements; however, software upgrades are needed in order to reduce the complexity of the C3D. At the conclusion of DT-IIA, the prototype system was packed and transported to SUBASE Bangor where it will under go DT-IIB/OT-IIA during the last quarter of FY-91. The WSS is scheduled to reach Milestone IIIA, Approval for Limited Production in the first quarter of FY-92. Milestone IIIB, Full Rate Production should be achieved first quarter FY-93, after OPEVAL in late FY-92. Installation of the first production system will be completed first quarter FY-94 at SUBASE Bangor.

PRODUCTION PLANNING: The cost to install a WSS will vary with the physical layout and operational requirements of each site. The average cost to procure and install a WSS will be approximately $6.2M. Within the current future years defense plan, i.e., FY-92 through FY-97, the Navy has programmed funding for six systems.

PROBLEMS: Unforeseen technical difficulties have caused the WSS to slip more than a year and have placed additional funding demands on the program. OPEVAL requirements are adding approximately $1.0M to the RDT&E effort. In FY-92, the program will experience a $4.0M shortage which will be made up with funds transferred from the Waterside Advanced Security Program RDT&E effort. As the Navy continues to experience funding cuts across the board, support by resource sponsors appears to be waning.

RDT&E

WATERSIDE ADVANCED SECURITY PROGRAM (WASP)

GENERAL DESCRIPTION: The WASP addresses preplanned product improvements to the baseline Waterside Security System (WSS) and introduction of equipment/technology providing enhanced system features. The WSS has several limitations which will need to be resolved to make the Navy's waterside program more cost effective. To resolve some of these recognized shortcomings, a preplanned product improvement/additional capabilities effort has been initiated. Several 6.2 RDT&E programs have been undertaken by the Defense Nuclear Agency (DNA) in support of the Navy's follow-on program. A majority of the 6.2 programs are scheduled to be transitioned to the Navy within the next two years.

Due to the fluid nature of the threat, the SSBN continuity of operations community's needs, and budget reductions limiting the number of proposed WSS permanent installations, a system capable of being shipped to areas on a moment's notice is needed. WASP will provide a rapidly deployable system. Additionally, under the original WSS effort, delay was included in the program. However, no inexpensive solution was available/developed. DNA is pursuing two projects which will significantly increase the delay and response capabilities of the baseline system. These systems are the lightweight barrier system and Shallow Water Intrusion Detection System.

STATUS AND SCHEDULE: A Tentative Operational Requirement (TOR) was promulgated by OP-91 on 3 Jul 90. COMNAVSEASYSCOM is preparing a Development Options Paper. RDT&E under the WASP will be initiated in FY-92 and will continue through FY-97.

PRODUCTION PLANNING: Total acquisition cost of WASP will be approximately $24M. Current planning projects the need for five rapid deployment systems and the enhancement of at least twelve operational WSS sites.

PROBLEMS: A shortage of approximately $4.0M is projected for WASP as a result of transferring $4.0M of FY-92 funds from WASP to WSS. The Navy is hoping to complete the program without additional funding. However, such funding may be required into FY-98.

RDT&E

SECURE STRUCTURES ASHORE (SSA)

GENERAL DESCRIPTION: In response to terrorism, unconventional warfare and other threats to high value/critical Navy shore based assets and the documented vulnerabilities of most shore based structures, the need exists for more secure structural components (locks, doors, and barriers) that will provide delay time against increasingly sophisticated and powerful hand and thermal tools as well as explosives. Accordingly, the Navy promulgated Operational Requirement #098-09-88, Secure Structures Ashore, on 28 May 1986.

The Secure Structures Ashore Program is a non-acquisition program that covers the development of test validated data required for the preparation of Standard Drawings, NAVFAC Guide Specifications, MIL-Specs and FED-Specs that will be used to procure structural components with MCON funds during construction or with O&MN funds during retrofit. Results will be buildings/facilities that will provide up to fourfold increase in delay times with potential saving of $50M a year in losses.

Drawings/data are being developed related to the following products:

- High Security Magazine Door System - standard design drawings and specifications for doors that provide a minimum of 20 minutes forced entry resistance to hand, power, and thermal attacks and a single explosive attack where linear shaped charges are used (i.e., a one time explosive of one or more linear shaped charges exploded simultaneously). Design will increase forced entry penetration time from under 2 minutes to 20 minutes or more.

- Personnel Door Systems - MIL-Specs, Drawings, and NAVFAC guides specification for doors that provide 1-, and 4-, minute delay times against various threat levels up to and including power and thermal tools and blast loads. Doors will have equivalent penetration resistance as wall construction mandated for secure facilities.

- Window Barrier System - MIL-Specs, drawings, and NAVFAC guides specification for windows that provide 1-,4-, and 15-minute delay times against various threat levels up to and including power and thermal tools and blast loads. Windows will have equivalent penetration resistance as wall construction mandated for secure facilities.

- Vehicle Barriers - test validated criteria and procurement specifications to resist 10,000 pound vehicle carrying 1,000 pound of equivalent TNT traveling at 15 m.p.h. and 50 m.p.h.

- Window Glazing - test validated criteria and design guidance to resist various levels of ballistic and forced entry attacks and blast over pressures.

- Security Assessment Models - computer application program for assessing the security levels of bases, identifying optimum upgrade options and optimizing use of existing resources.

- High Security Padlock - procurement package that will provide more forced entry attack resistance at comparable or less cost than is provided in present DOD padlocks. Fabrication design specifications will enable many manufacturers to produce the padlock and will reduce procurement time and effort. It will replace current high and medium security padlocks.

- Electronic Lock - procurement specifications for commercially available hardware that satisfies Navy penetration resistance requirements for use on low, medium, and high security doors.

- POL Protection, Treat Model, Secure Magazine Door Boltwork, Secure Utility Systems, Transportable Protection, Standoff Protection, etc. - decision reports on need for test validated designs.

STATUS AND SCHEDULE - All projects will be completed in FY-93. Recommendations resulting from the Decision Reports will be used for a follow-on program, if necessary.

PROBLEMS - None

RDT&E

SHIPBOARD PHYSICAL SECURITY (SPS)

GENERAL DESCRIPTION: SPS addresses physical security equipment and measures used to protect U. S. Navy ships against unauthorized intrusion and attack from swimmers, small boats, and light aircraft. In FY-91, in order to eliminate duplication of effort and achieve savings in RDT&E expenditures, the Shipboard Nuclear Weapons Security (SNWS) Program was combined with SPS. This coordinated effort will ensure eommonality of security equipment used on conventional and nuclear weapons capable ships.

The SPS system will be modular in form and configured to improve the security posture on selected vessels in times of increased threat. The single most critical issue is the adaptation of land-based equipment for shipboard use. Non-developmental Items (NDI) will be used whenever possible. When required, SPS equipment will be more rugged for shipboard use.

The resulting SPS components should be effective against peacetime threats and should augment/complement the ship's existing self defense capabilities against wartime unconventional threats. SPS will be developed for use on all Navy ships. The program is being developed so that the fleets will be able to select individual components as needed without a requirement to choose or procure the total package.

STATUS: A revised SPS Operational Requirement (OR) has been drafted and is currently in review. The MMS will be subjected to final OPEVAL in May 1991. Results are expected in July 1991.

PRODUCTION PLANNING: System outfitting will vary by ship class and area of deployment. Certain elements of the system will be provided to the fleets to be placed aboard vessels prior to deployment. The Navy estimates a requirement for 300 systems. Total acquisition cost of SPS will be approximately $255 million.

PROBLEMS: Lack of an approved OR and the shrinking resource situation creates the possibility for waning of support follow-on funding for procurement and installation.

RDT&E

PORTABLE EXPLOSIVE DETECTOR (PED)

GENERAL DESCRIPTION: On 13 July 1989, the Joint Requirements Working Group (JRWG), under the chairmanship of the Navy, met to discuss a Statement of Need (SON) for PEDs submitted by the Air Force and develop a Draft Joint Services Operational Requirement (JSOR) for PEDs. In accordance with DOD Directive 3224.3, the Navy, as the lead service for operational PED equipment, tasked the Naval Explosive Ordnance Disposal Technical Center, (NAVEODTECHCEN), Indian Head, MD to evaluate the performance of PEDs under laboratory and field conditions.

In December 1989, after extensive testing, NAVEODTECHCEN reported that commercially available PEDs are limited in performance with respect to detecting a range of explosives, operating environments, and maintainability. The following recommendations were made:

- Do not field currently available commercial PEDs.
- Continue use of explosive detecting dogs.
- Continue investigation of near-term and long-term PED technologies.

STATUS AND SCHEDULE: The Navy continues to monitor private industry, academia, and other federal agencies in the area of PED development. A Security Equipment Integration Working Group member, representing DOD, has become a member of the Interagency Advisory Committee for Security Equipment Subcommittee on Contraband Detection.

PRODUCTION PLANNING: N/A

PROBLEMS: N/A

RDT&E

PRIORITIZATION PROGRAM (PP)

GENERAL DESCRIPTION: Each budget cycle, the Military Departments request funding for new and ongoing 6.3/6.4 RDT&E programs from DOD. DOD must determine the relative value of each proposed program based on overall DOD needs, probability of success, return on investment, and a host of other factors. Historically, funding for PSE RDT&E programs has been subjective with no systematic way of comparing the relative value of a given program. Accordingly, an objective method for determining priority of programs was sought under Navy management.

The PP is intended to provide a means whereby a rank-ordering process, and thus the allocation of funds, can be accomplished in an objective manner. This is done based solely on evaluation of each proposed program against a set of standard criteria. The PP is a software program relying on an algorithm consisting of several mathematical equations linked together. At certain points, digital logic is used to determine which equation is to be applied.

STATUS AND SCHEDULE: The PP effort was initiated in FY-90 and will be completed in FY-91. PP software version 2.0 (with instructions) has already been distributed to all services. Software is being upgraded and version 2.1 is expected no later than September 1991. The DOD software package will differ slightly from that of the Services. It will be able to combine and prioritize all DOD RDT&E programs.

PRODUCTION PLANNING: Each Service and DOD (ODDR&E/P&R) will receive version 2.1 of the PP software and a user's manual. Additionally, a master copy will be provided.

PROBLEMS: No problems have been encountered to date.

PROCUREMENT AND INSTALLATION
PHYSICAL SECURITY OF NUCLEAR WEAPONS (ASHORE)

GENERAL DESCRIPTION: This program is intended to provide for the timely procurement and deployment of physical security systems for the protection of nuclear weapons ashore. Requirements for this program are established by the Office of the Deputy Under Secretary of Defense (Security Policy). The implementing instruction in the Navy is OPNAVINST C8126.1, "NUCLEAR WEAPONS SECURITY MANUAL." The current thrust is to provide armored personnel carriers, armored logistic transports, and secure communications equipment.

ARMORED LOGISTIC TRANSPORTS (ALT)

ALTs are procured to replace the container vehicles currently used to provide armor protection for nuclear weapons during on-station movement. The primary development activity is Naval Weapons Support Center, Crane, IN.

STATUS: Navy is using an Air Force contract to purchase K-loaders.

PROBLEMS: The operational concept for the ALTs currently require the K-Loader to load the weapon(s) into the unit. Alternatives are being explored to find a cheaper and more efficient means of loading.

ARMORED PERSONNEL CARRIERS (APC)

The APC is procured to provide protection for reaction forces from small-arms fire.

STATUS: Navy is using an Army contract to purchase APCs.

PROBLEMS: The APCs are purchased in limited numbers when compared to other vehicles used by the DOD. This makes them very costly, and they require unique ILS plans (which increases their life-cycle cost).

FUTURE APPROACH: We are exploring alternatives to using conventional APCs. If a standard vehicle can be hardened and meet all operational/safety considerations, it may be more cost effective.

SECURE COMMUNICATIONS EQUIPMENT

Ordnance Communications (ORDCOM) provides complete, dedicated communications systems for security personnel. The system consists of hand-held, mobile, and fixed base stations equipment with Data Encryption Standard voice protection.

STATUS: Information on specific sites receiving ORDCOM equipment is available from OP-09N1.

PROCUREMENT AND INSTALLATION
PHYSICAL SECURITY OF NUCLEAR WEAPONS (AFLOAT)

GENERAL DESCRIPTION: This program addresses a wide range of measures, both hardware and procedural, needed to better protect our ships. Current focus and priority are directed to mitigating the vulnerability of nuclear weapons stored aboard ships to unconventional threats (terrorists, radical groups, disaffected crew members), and to meeting the requirements of OPNAVINST C8126.1. DEPSECDEF memo of 2 June 1988 and SECNAV memo of 18 October 1988 mandate that resources for Shipboard Nuclear Weapons Security be identified to complete program requirements by the year 2000. The present procurement and installation effort consists of two shipboard systems: the Protected Voice Portable Communication System (PVPCS) MK4 and the Magazine Security System (MSS) MK1.

PVPCS MK4

The PVPCS MK4 provides a dedicated and digitally encrypted means for communications for ship's security personnel during normal operations and during security alerts. It consists of hand-held transceivers, supporting components, and permanently mounted equipment, e.g., antenna strung throughout the vessel, repeaters and combiners. The PVPCS is designed to provide point-to-point coverage throughout vital areas of the ship. It operates in a continuous mode in any ship operating state.

STATUS AND SCHEDULE: Initial Operating Capability (IOC) was achieved 30 July 1989. Thirty seven (37) PVPCS shipboard installations have been completed to date. A total requirement of 302 installations is planned. The Navy currently has approximately 89 systems in inventory and dependent on ship availability is installing them.

PROBLEMS: Anticipated OPN budget cuts could drastically slow down rate of installations. This program has necessary installation funding from the resource sponsors to complete the program by FY-95. Initial round of budget cuts has delayed procurement through FY-97. Further anticipated budget cuts could delay the final installations past the year 2000.

FUTURE APPROACH: Attempt to front load this program with necessary OPN funding to complete installations by FY-95.

MSS MK1

The MSS MK1 is a below deck security system designed for the protection of nuclear weapons carried on nuclear capable/ certified surface ships. It consists of the following equipment: Balanced Magnetic Switch, Infrared Motion Detector, Audible Alarm, Emergency Shutoff Unit, System Indicator Unit, Remote Power Enclosure, Local Alarm Controller, Junction Box, Remote Indicator Unit, and the MK6 MOD 1 Shipboard Internal Locking System Module.

STATUS: MSS MK1 is undergoing additional operational testing. An earlier Operational Evaluation surfaced several problems. There is a total requirement of approximately 153 systems to be installed during the period FY 91-98.

PROBLEMS: The MSS MK1 production and installation schedules are geared to satisfy DEPSECDEF and SECNAV guidance to provide an acceptable level of physical security for nuclear weapons capable surface ships by the year 2000. Pending budget cuts make attainment of this goal impossible.

FUTURE APPROACH: Attempt to protect OPN dollars to achieve completion of all installations by the year 2000.

PROCUREMENT AND INSTALLATION
ELECTRONIC SECURITY SYSTEMS (ESS)

GENERAL DESCRIPTION: The ESS Program, formerly referred to as the Remote Sensor Systems for Physical Security (RSSPS) Program is the key facilities program essential to providing necessary levels of physical security to protect Navy assets. With continuing worldwide terrorism and decreases in fiscal resources, effectiveness and efficiency imperatives mandate that the highest priority be afforded to security programs through centralized management with dedicated resources. Navy ESS includes intrusion detection, assessment, and automated entry control for physical security. Major categories/subelements of the program are as follows:

Special Ammunition Storage (SAS) - integrates interior and exterior sensors and CCTV systems at nuclear weapons storage sites.

Readiness Assets (RA) - includes intrusion detection, assessment, and access control at the following types of critical Navy activities:

Naval Air Stations
Naval Stations
Naval Shipyard and Repair Facilities
Naval Communication Stations
Naval Support Activities

Arms, Ammunition and Explosives (AA&E) - provides interior sensors (and tamper alarms on magazines, e.g., AIBs) for conventional munitions and weapons.

Waterside Security System (WSS) - addresses the need for physical security measures to protect DOD facilities and critical assets against waterborne intrusions. The system will be primarily composed of non-development items, e.g., radars, thermal and visual imagers used to detect and assess high and low speed boats and surface swimmers. Two major components/ subsystems (a sonar for underwater swimmer detection and classification and a command, control, and communication display that will provide integration and control of WSS elements) are being developed. The system is being designed to interface with DOD Base Installation Security System equipment/systems.

Harborlight - supports the White House Military Office. Two locations have been identified for ESS/upgrade.

STATUS AND SCHEDULE:

SAS - security upgrades were completed at three sites this fiscal year - see attached schedule for number of future installations.

RA - eight sites are currently under contract - see attached for current schedule.

AA&E - three sites, NAS Whidbey Island, WPNSTA Yorktown and NAVSTA Roosevelt Roads had physical security upgrades completed during FY-90 - see attached for current schedule.

WSS - system is presently in full scale development. NAVSEA (Code 6632D) is the RDT&E Program Manager and NAVOCEANSYSCEN Hawaii (Code 513) is the Technical Direction Agent. Technical and Operational Evaluations (TECHEVAL and OPEVAL) and the Milestone IIIA decision are scheduled to occur in FY-92. Initial Operating Capability (IOC) of full-up production system is scheduled in FY-94. Anticipated rate of production/installation is approximately two systems per year - see attached schedule. The first systems will be installed at strategic submarine bases.

Harborlight - Delivery orders on an existing contract are in place. Installation of systems at both sites to be completed during FY-91.

PROBLEMS:

SAS - recurring budget restraints result in sites being deferred to out-years.

RA - available MCON funds determine site schedules.

AA&E - priority of SAS and high priority/special projects have impacted and will continue to affect installation of systems.

WSS - the decision to have the WSS retain its Acquisition Category IV designation has imposed additional testing requirements (i.e., OPEVAL). In addition, technical problems with developmental items may cause the RDT&E schedule to slip further. Total impact may cause over one year delay.

FUTURE APPROACH:

WSS - try to obtain Approval for Limited Production decision in early FY-92 in order to attain FY-94 IOC.

ESS SCHEDULE

SAS

FY-91	FY-92	FY-93	FY-95	FY-95-97
2 Sites	1 Site	1 Site	2 Sites	TBD

RA

FY-91	FY-92	FY-93
NAVSTA Rosy Rds	NAS Sigonella	CINCLANTFLT Hqtrs
NSA Naples	SSC Great Lakes	NAF Mayport
NAS Cubie Pt	Transmitter Site	

FY-94	FY-95-97
SUBASE N. London	TBD

AA&E

FY-91	FY-92
NAS Brunswick (C)	NAVSWC Dahlgren
NAS Bermuda (C)	NAVSTA Adak
NAS Alameda (C)	NAS Fallon
NAVSTA Guantanamo Bay (C)	NAVSTA Canal Zone
NAVMAG Lualualei (C)	NAS Key West
NAVSTA Rota (C)	NAS Cecil Field
NAS Guantanamo Bay	NAVSTA Mayport
NAVWPNSUPCEN Crane	
NAVPHIBSCL San Diego	
WPNSTA Yorktown	
NAS Corpus Christi	
NAVSTA Roosevelt Roads	

FY-93	FY-94
NAVSTA Norfolk	NAVORD White Sands
NAVSUBSUPFAC New London	NAS Miramar
NSWC White Oak	NAVMAC Cartagena
NAS Norfolk	COMEODGRU Two Fort Story
NAS Key West	NAVSHIPYD Norfolk
NAS Agana	NAF El Centro
NAS Lajes	NAVAIRTESTCEN Patuxent River
NAS Norfolk	NAS Oceana
NAS Signonella	CBC Gulfport
	NAVSHIPYD Mare Island

WSS

FY-91-FY-93	FY-94	FY-95
PROTOTYPE	SUBASE Bangor	SUBASE New London
	SUBASE Kings Bay	

FY-96	FY-97	FY-98
SUBASE San Diego	NAS North Island	TBD
	NAVBASE Norfolk	

PROCUREMENT AND INSTALLATION
MILCON IDS

GENERAL DESCRIPTION: Program provides Interior Intrusion Detection System (IDS) for Military Construction (MILCON) projects. Without IDS, these projects will not be complete and usable, and the gaining activity will not be able to occupy the facility. IDS is required in MILCON projects involving classified material, sensitive compartmented information facilities, special programs, and assets of high dollar value and long lead time replacement.

MCON IDS SCHEDULE

FY-91	FY-92	FY-93	FY-94
22 Sites	14 Sites	2 Sites	23 Sites
FY-95	FY-96	FY-97	FY-TBD
29 Sites	5 Sites	6 Sites	123

PROGRAMS: Due to dynamics involved with MILCON program, i.e., "instability of MILCON process", it is difficult to specify the actual number projects required by IDS.

Attachment E

Marine Corps Presentation Charts

USMC ELECTRONIC SECURITY SYSTEMS

OVERVIEW

* Physical Security Structural Upgrade Program (PHSSUP)
* Arms, Ammunition and Explosives Intrusion Detection System (AA&E IDS)
* Automated Entry Control System (AECS)
* HMX-1 Security Enhancements

FILE: L:\VIEWGRAF.43\PSEAG.491

USMC ELECTRONIC SECURITY SYSTEMS (ESS)

DESCRIPTION SHEET

Physical Security Structural Upgrade Program (PHSSUP)

Purpose:	Enhances physical security posture.
Description:	Minor construction funding used to upgrade armories & magazines, and address other physical security requirements.
Start Date:	Ongoing program.
Completion Date:	Ongoing program. Continuous reevaluation of physical security posture.
Planned Applications:	USMC-wide. AA&E and other critical facilities. Presently appropriated approximately $1.5 million O&MMC (R-2) annually.

DESCRIPTION SHEET (CONTINUED)

Arms, Ammunition and Explosives Intrusion Detection System (AA&E IDS)

Purpose:	Enhances physical security posture, while returning Marines to perform Fleet Marine Force duties.
Description:	State of the art, expandable, non-developmental initiative (NDI) IDS system. Foundation for totally integrated ESS system.
Start Date:	June 1987.
Completion Date:	February 1994.
Planned Applications:	USMC-wide. AA&E sites. USMC will POM for follow-on initiative to add classified material control centers, special compartmentalized intelligence facilities, financial activities, warehouses, and other critical facilities in the future.

DESCRIPTION SHEET (CONTINUED)

Automated Entry Control System (AECS)

Purpose:	Enhances physical security posture, allowing security personnel to perform more critical security tasks.
Description:	Automated access control of restricted areas using magnetic strip card readers, personal identification number (PIN) pads, lighting, turnstiles, vehicle gates, and closed circuit television (CCTV). Integrates with the AA&E IDS aboard Marine Corps Air Stations to allow for centralized control of restricted entry and egress.
Start Date:	February 1990.
Completion Date:	August 1992.
Planned Applications:	USMC-wide. Initial installation at Marine Corps Air Stations. Future possible applications at industrial/warehouse areas located aboard USMC installations.

DESCRIPTION SHEET (CONTINUED)

HMX-1 Security Enhancements

Purpose:	Increases protection of presidential aircraft (HMX-1) by deterring, delaying, detecting, and denying unauthorized entry.
Description:	A comprehensive physical security program consisting of physical barriers and electronic security system (ESS) applications, which includes an intrusion detection system (IDS), closed circuit television (CCTV), automated entry control, and control and display equipment.
Start Date:	June 1988.
Completion Date:	December 1990.
Planned Applications:	MCAF Quantico.

PHYSICAL SECURITY EQUIPMENT

USMC PROCUREMENT
(IN MILLIONS)

TYPE OF EQUIP/SYSTEM	NUMBER OF SETS	FY 91	FY 92	FY 93	FY 94 (COST/BUDGETED)	FY 95	FY 96	FY 97	FY 98	Subtotal
Physical Security Structural Upgrade Program	54 (7/YR)	.900 /.900	.900 /.900	.900 /.900	.900 /.900	.900 /.900	.900 /.900	.900 /.900	.900 /.900	7.200 (Note 1) /7.200
AA&E IDS	32	2.820 /2.820	5.040 /.900 (Note 2)	1.462 /1.462						9.322 (Note 3) /5.182
AECS	9	.840 /.840	2.340 /2.340	1.461 /1.205	.730 /.730	.746 /.746	.875 /.762	/.779		4.385 (Note 3) /4.129
HMX-1 Security Enhancements	1	.564 /.564								.564 /.564
TOTAL FUNDS		5.124 /5.124	8.280 /8.280	3.823 /3.567	.900 /.900	1.646 /1.646	1.775 /1.662	.900 /1.679	.900 /.900	21.471 /17.075

NOTES:

1 Operations and Maintenance, Marine Corps (O&MMC) Funding

2 Productivity Investment Fund proposal to complete this AA&E IDS portion is approved.

3 Any funding for "add-on" electronic security systems or other expansion in scope to be submitted as POM initiatives.

PHYSICAL SECURITY EQUIPMENT

USMC INSTALLATION COSTS
(IN THOUSANDS)

TYPE OF EQUIP/SYSTEM	NUMBER OF SETS	FY 91	FY 92	FY 93	FY 94 (COST/BUDGETED)	FY 95	FY 96	FY 97	FY 98	Subtotal
Physical Security Structural Upgrade Program	54 (7/YR)	600 /600	600 /600	600 /600	600 /600	600 /600	600 /600	600 /600	600 /600	4800 /4800
AA&E IDS	32	1880 /1880	3360 /600 (Note 2)	800 /800						6040 (Note 3) /3280
AECS	9	560 /560	1560 /1560	80 /80	80 /80	80 /80	80 /80			2460 (Note 3) /2460
HMX-1 Security Enhancements	1	376 /376								376 /376
TOTAL FUNDS		3416 /3416	5520 /2760	1480 /1480	680 /680	680 /680	680 /680	600 /600	600 /600	13656 /10896

NOTES:

1 PHSSUP uses a continuous rotation cycle of all USMC installations to reevaluate their physical security posture.

2 Productivity Investment Fund proposal to complete this AA&E IDS portion is approved.

3 Any funding for "add-on" electronic security systems or other expansion in scope to be submitted as POM initiatives.

UNITED STATES MARINE CORPS

DOD Physical Security Master Plan
Equipment Implementation
Completely Implemented Items

Number, Short Title or Description	Option Number (or Summary)	Page	Remarks	Date
1. Physical Security Structural Upgrade Program (PHSSUP)	Par 4.2.1	C-4-1	An ongoing program to ensure AA&E storage facilities are in compliance with directives. Program is funded by O&M funds.	December 1982
2. AA&E Intrusion Detection System (AA&E IDS)	Par 4.2.2	C-4-1	Essentially an ongoing program to install a uniform, state of the art IDS system at all USMC AA&E sites; current capability initiative planned to supersede AA&E IDS to install IDS at other critical facilities.	June 1987
3. Automated Entry Control System (AECS)	Par 4.2.3	C-4-1	Formerly "Flight Line Security" Program; current capability initiative planned to supersede AECS to install automated access controls at other critical facilities.	February 1990

UNITED STATES MARINE CORPS

DOD Physical Security Master Plan
Equipment Implementation
Partially Implemented Items

Number, Short Title or Description	Option Number (or Summary	Page	Remarks	Estimated Completion Date
None	None	None	None	None

UNITED STATES MARINE CORPS

DOD Physical Security Master Plan
Equipment Implementation
Overcome By Events Items

Number, Short Title or Description	Option Number (or Summary)	Page	Remarks	Date Of Determination
None	None	None	None	None

Attachment F

Air Force Presentation Charts

AIR FORCE BISS PROGRAM

PRESENTED BY: COLONEL ANDREW CORSO

AIR FORCE SECURITY POLICE CENTER

MAJOR DAVID P. MACKENZIE
ESD/AVJB
BISS PROGRAM MANAGER

BISS EXECUTION

FY90

BA	COMMITMENTS	OBLIGATIONS	EXPENDITURES
$5,509,000	$5,509,000	$5,483,412	$4,214,894
	100%	99.53%	76.51%

FY91

BA	COMMITMENTS	OBLIGATIONS	EXPENDITURES
$4,909,000	$4,206,597	$3,503,140	$336,875
	85.69%	71.36%	6.86%

DATA A/O 22 APR 91 FROM ;OCAL ACCOUNTING RECORDS

AF ANNUNCIATOR PROGRAM

OBJECTIVE:

- **OBTAIN EQUIPMENT TO MEET AF PRIORITY B&C STAND-ALONE, LARGE AND SMALL AREA, AND PRIORITY A REDUNDANT ALARM ANNUNCIATION/CCTV SYSTEM NEEDS UNTIL FULL CAPABILITY DOD ANNUNCIATOR IS AVAILABLE**

APPROACH:

- **3 EFFORTS ON-GOING**
  - **-- STANDARD ANNUNCIATOR SYSTEM (STAS), AN/GSS-41**
  - **-- SMALL ANNUNCIATOR SYSTEM (SMAS), AN/GSS-44**
  - **-- SUPPORT TO ARMY INTEGRATED COMMERCIAL INTRUSION DETECTION SYSTEM (ICIDS)**

STANDARD ANNUNCIATOR SYSTEM

CAPABILITIES:

- NON-NUCLEAR INSTALLATIONS REQUIRING CCTV
- UP TO 4096 SENSORS
- UP TO 64 CAMERAS
- UPS
- ELECTRONIC MARKING ON VIDEO SIGNAL

STATUS:

- DEVELOPMENT PHASE COMPLETE
- PRODUCTION COMPLETE
- 8 OPERATIONAL INSTALLATIONS
- PROGRAM MGT RESPONSIBILITY TRANSFER (PMRT) IN MAY 1991

SMALL ANNUNCIATOR SYSTEM

CAPABILITIES:

- DESIGNED FOR SMALL PRIORITY B&C INSTALLATIONS
- NO CCTV
- COMPACT SIZE TO MEET SPACE RESTRICTIONS
- UP TO 2048 SENSORS

STATUS:

- DEVELOPMENT PHASE COMPLETE
- PRODUCTION COMPLETE
- 5 OPERATIONAL SYSTEMS
- PMRT JULY 1991

ADVANCED ENTRY CONTROL SYSTEMS PROGRAM

OBJECTIVE:

PROVIDE ADVANCED ENTRY CONTROL SYSTEM FOR PRIORITY A, B, AND C RESTRICTED AND CONTROLLED AREAS WITH INCREMENTAL LEVELS OF IDENTITY VERIFICATION STATUS

APPROACH:

- DEVELOP PROTOTYPE AND GATHER HUMAN FACTORS DATA AT ELLSWORTH AFB
- DEVELOP PURCHASE DESCRIPTIONS/SPECS BASED ON PROTOTYPE
- PROCURE AND FIELD NDI SYSTEM ON ID/IQ BASIS

CAPABILITY:

- THREE FORMS OF IDENTIFICATION (MAGNETIC CARDS, PERSONAL IDENTIFICATION NUMBER AND PERSONAL IDENTITY VERIFIER)
- COMPATIBLE WITH ICIDS AND FIELDED ANNUNCIATORS/IDS SYSTEMS
- EXPANDABLE AS NEEDS CHANGE OR FOR SITE TAILORING

ADVANCED ENTRY CONTROL SYSTEMS PROGRAM

STATUS:

- PROTOTYPE INSTALLATION AT ELLSWORTH JULY 1991
- COMMERCIAL MARKET SURVEYED (32 RESPONDEES)
- ACQUISITION STRATEGY PANEL PASSED
- DRAFT RFP IN PREPARATION

SCHEDULE:

- DRAFT RFP RELEASE	SEP 91
- RFP RELEASE	OCT 91
- PROPOSAL RECEIPT	DEC 91
- CONTRACT AWARD	FEB 92
- 1ST INSTALLATION	SEP 92

COST:

3600 (FY91-FY94) $6.2M
3080 (FY93-FY97) $29.7M (AF ONLY)

NOTE: PLANNED CONTRACT CEILING $70M (ID/IQ)

DISPERSED INTEGRATED SECURITY SYSTEM

DESCRIPTION:

- PORTABLE/TRANSPORTABLE SYSTEM CAPABLE OF: DETECTION, ALARM REPORTING, ASSESSMENT, COMMUNICATIONS, RESPONSE

STATUS:

- NEW PROGRAM

PROGRAM PLAN:

- TWO PHASE ACQUISITION
  - -- PHASE 1: NDI INTEGRATION
  - -- PHASE 2: DEVELOP/UPGRADE TECHNOLOGICAL CAPABILITY

SCHEDULE:

- PHASE 1: FY91-FY93
- PHASE 2: FY93-FY95

DISPERSED INTEGRATED SECURITY SYSTEMS

- REQUIREMENT:

  -- NEEDED CAPABILITIES HAVE BEEN STATED IN DRAFT SONs, DRAFT JSORs, OPS CONCEPTS AND ROCs

- MISSION:

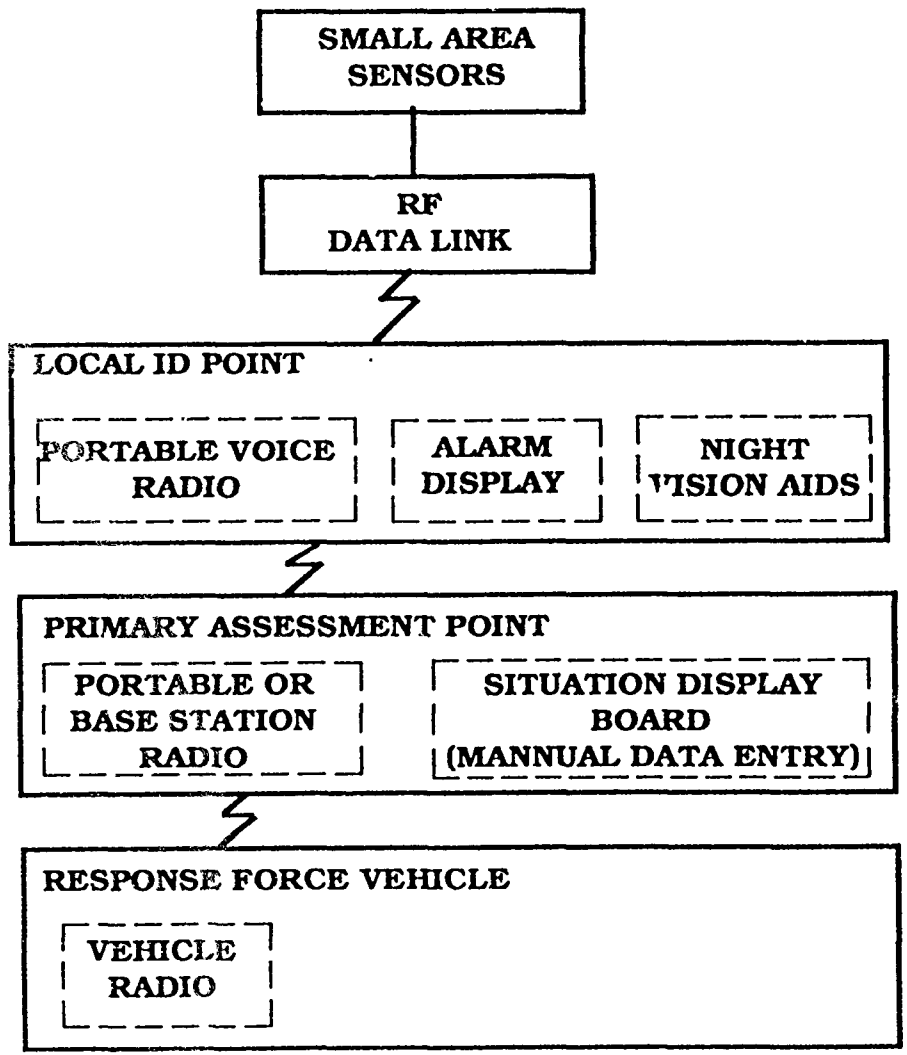
  -- PROTECT DIVERSE ASSETS AGAINST VARIOUS THREATS
  --- AUGMENT PHYSICAL SECURITY FORCES
  --- PROTECT BARE BASES, DISPERSED SYSTEMS AND MOBs

- CAPABILITY:

  -- DETECT, IDENTIFY, ASSESS, RESPOND, DELAY, DENY
  --- A TOTAL SECURITY PACKAGE/SYSTEM
  --- QUICK REACTION WORLDWIDE APPLICATION
  --- MODULAR
  --- EASILY DEPLOYABLE

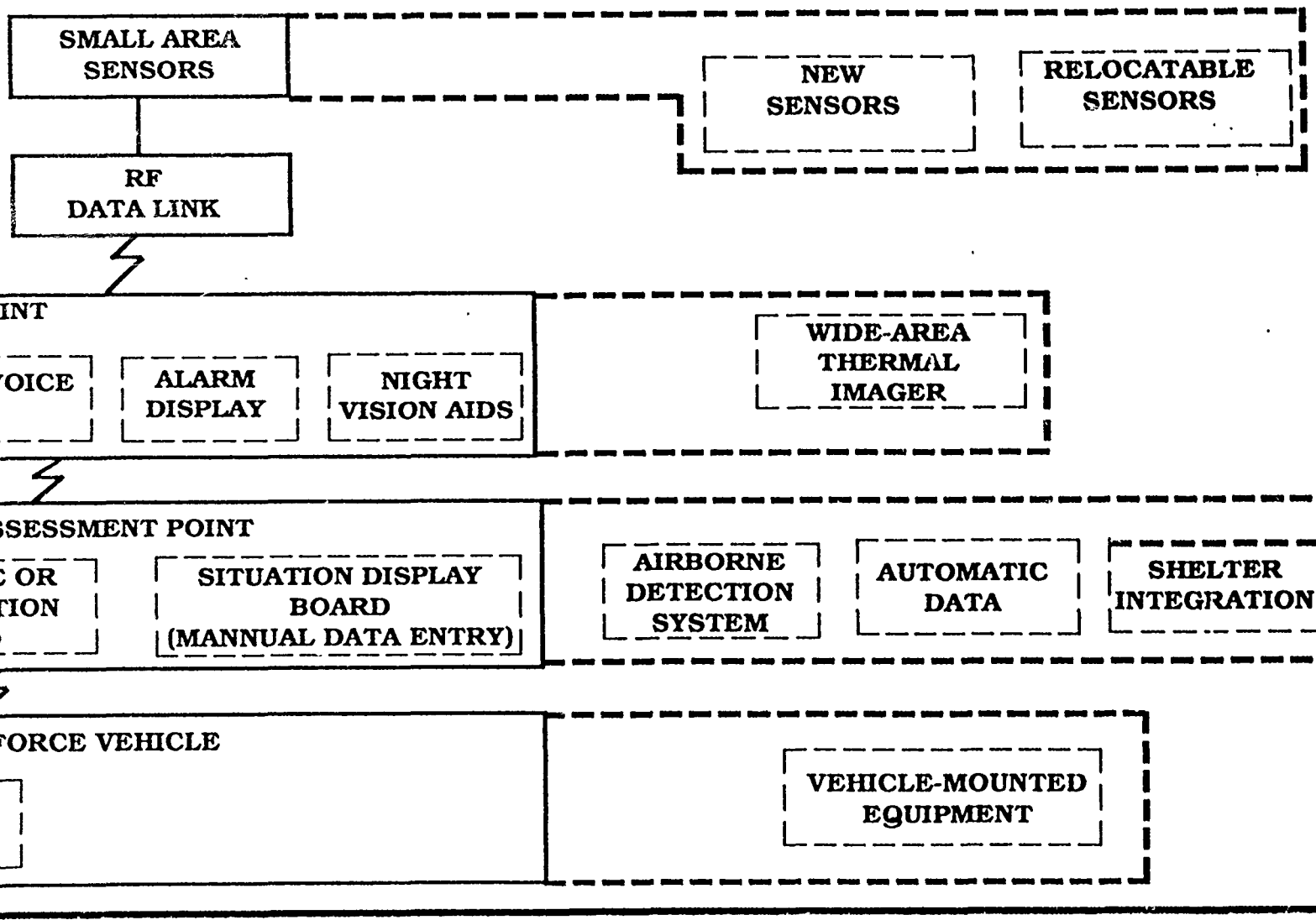
DISS SYSTEM ELEMENTS

PHASE 1



DISS SYSTEM ELEMENTS

PHASE 2



PORTABLE RECONFIGURABLE LINE SENSOR

DESCRIPTION:
- LINE-OF-SIGHT INTRUSION DETECTION SENSOR
- TEMPORARY/PORTABLE, FIXED OR MOBILE

STATUS:
- FSD DOCUMENTATION/SPECIFICATION COMPLETE
- COMMERCIAL MARKET SURVEY CONDUCTED
- PROGRAM START REVIEW COMPLETE TO ESD/CC
- RFP IN PREPARATION

PROGRAM PLAN:
- COTS/NDI PROCUREMENT ANTICIPATED
- EFFORT TIED TO DISS PHASE ONE

SCHEDULE: FY91 THROUGH FY93

COST: $2.4 MILLION (BUDGET ESTIMATE)

THERMAL IMAGER SYSTEMS

DESCRIPTION:

- TRANSPORTABLE/FIXED PASSIVE INFRARED SYSTEM
- AUTOMATIC, COMPUTER CONTROLLED WIDE AREA DETECTION & ASSESSMENT; TARGET TRACKING (MIDAS)

STATUS: NEW PROGRAM

PROGRAM PLAN:

- CONCEPT DEVELOPMENT/DEMO SYSTEMS
  - -- MIDAS (DNA/SNL)
  - -- VISDTA (AF/SNL)
- VISDTA SYSTEM SPECIFICATION PREPARED
- MIDAS TRANSITION TO AF BY DNA IN FY 92-93
- CONSOLIDATION OF PROGRAMS MAY BE APPROPRIATE

SCHEDULE: FY92 START (PENDING AVAILABLE FUNDS)

COST: $15.2M (BUDGET ESTIMATE)

ENGAGEMENT SIMULATION SYSTEM PROGRAM

OBJECTIVE:

PROVIDE A TRAINING SYSTEM FOR USE BY PHYSICAL SECURITY PERSONNEL IN THE SIMULATION OF TACTICAL ENGAGEMENTS AGAINST ADVERSARIES.

APPROACH:

- BASED ON DNA EXPERIENCE WITH TESS DEVELOPMENT
- CONDUCT EVALUATION OF EXISTING COMMERCIAL SYSTEMS
- GO FOR THE "80%" SOLUTION
- PROVIDE NDI EQUIPMENT WITH CONTRACT SUPPORT

CAPABILITIES:

- INCLUDES PERSONNEL AND FIXED EMPLACEMENTS
- INSTANT CASUALTY NOTIFICATION
- IDENTIFICATION OF SHOOTER AND TARGET
- TIMING OF EVENTS
- REMOTE RESET

ENGAGEMENT SIMULATION SYSTEM PROGRAM

STATUS:

- TESS HARDWARE PROVIDED TO ESD
- COMMERCIAL MARKET SURVEY CONDUCTED
- ALTERNATIVES IDENTIFIED TO AFOSP
- AWAITING FUNDING

SCHEDULE:

- NEW PROGRAM
- PLANNED FY92 START

COST:

$.646M BUDGET ESTIMATE (3600)

AIRBORNE INTRUSION DETECTION SYSTEM

DESCRIPTION:

- SMALL TRANSPORTABLE OR TACTICAL SYSTEM
- DETECT ULTRA-LIGHT AIRCRAFT, HANG GLIDERS, PARACHUTISTS
- DETECTION RANGE 3KM NOMINAL
- PROTECTION FOR SMALL FIXED OR TEMPORARY SITES; HAS DISS APPLICATIONS

STATUS: NEW PROGRAM; CONCEPT OF OPERATIONS DIFFERS FROM DISCONTINUED RAIDS PROGRAM

PROGRAM PLAN:

- REQUIREMENTS & MISSION ANALYSIS
- NDI SYSTEMS DEMONSTRATION/ EVALUATION
- DRAFT SPECIFICATION
- PROCUREMENT OF NDI SYSTEM, IF APPROPRIATE
- DEVELOPMENT PROGRAM, ONLY IF REQUIRED

SCHEDULE: PLANNED FY95 START

COST: $2M BUDGET ESTIMATE (NDI DEMO/EVAL ONLY)
$7.1M THROUGH FSD

AIRCRAFT EMBEDDED SECURITY SYSTEM

DESCRIPTION:

- SENSORS INTEGRATED INTO AIRFRAME
- REPORT ALARMS TO REMOTE ANNUNCIATOR
- SENSOR POWER PROVIDED BY AIRCRAFT BATTERIES
- EVALUATE WEIGHT & PERFORMANCE PENALTIES

STATUS: NEW PROGRAM

PROGRAM PLAN:

- REQUIREMENTS & MISSION ANALYSIS
- NDI DEMONSTRATION/EVALUATION
- PRODUCE DRAFT SPECIFICATION
- FSD PROGRAM RECOMMENDATIONS

SCHEDULE: DEFERRED UNTIL FY 95

COST: $6.0M (BUDGET ESTIMATE)

BASE AND INSTALLATION ENTRY CONTROL SYSTEM

DESCRIPTION:

- AUTOMATED ENTRY CONTROL SYSTEM BASED ON AECS
- FREE FLOW ACCESS THROUGH BASE ENTRANCES
- MINIMIZE RELIANCE ON HUMAN OBSERVATION

STATUS: NEW PROGRAM

PROGRAM PLAN:

- FSD PROGRAM
- INTEGRATE/ADAPT AECS SYSTEM TO BIECS APPLICATION

SCHEDULE: DEFERRED UNTIL FY 98

COST: $2.7M (BUDGET ESTIMATE)

RDT&E
USAF BISS STANDARD AND SMALL ANNUNCIATORS

GENERAL DESCRIPTION: The Air Force has an ongoing requirement for annunciator systems. The current program includes a small scale development and procurement phase in which limited quantities of annunciators will be produced for immediate operational requirements. The second phase will acquire equipment for future requirements through the Army ICIDS program, once ICIDS becomes available for Joint Service use.

These annunciator systems integrate a computer-based annunciator, CCTV, and associated data communications equipment. This equipment receives sensor inputs, transmits alarm data, and annunciates alarm conditions so an operator can effectively localize and assess threats. These systems are highly modular and expandable, yet they maintain ease of operation and maintenance. The systems are fully supportable, using NDI hardware and software wherever possible.

There are four discrete elements to this program. The first element is the Standard Annunciator System (STAS). The STAS is an integration project of commercial off the shelf equipment and minimum developed software. This system provides the required capability to secure Air Force Priority B and C resources.

The second element is the Small Annunciator System (SMAS). The SMAS is an equipment subset of the STAS and is to be used for small Priority B and C applications that do not require CCTV capability.

The third element is the Local/Remote Annunciator System (LRAS). This system is an integration of the STAS and SMAS to meet priority A security requirements. This system has been demonstrated but production has been held in abeyance in deference to ICIDS.

The fourth element is the Integrated Commercial Intrusion Detection System (ICIDS). ICIDS is an Army procurement that is expected to meet all annunciator requirements for the Air Force beginning in FY93.

STATUS AND SCHEDULE: The Annunciator Development program will be concluded in FY91 with the completion of actions necessary for Program Management Responsibility Transfer (PMRT) the STAS and SMAS to Air Force Logistics Command (AFLC). Initial Operating Capability (IOC) has been achieved. The progress of the ICIDS Program is being monitored and initial estimates of Air Force production requirements have been identified to the Army.

PRODUCTION PLANNING. Limited production is planned through FY92 to satisfy immediate Air Force needs. Total production costs are estimated to be $5.7M for the combined Standard and Small Annunciator Program.

PROBLEMS: None.

RDT&E
USAF BISS ADVANCED ENTRY CONTROL SYSTEM (AECS)

GENERAL DESCRIPTION: The AECS is an access control system to be employed at entry control points of restricted and controlled access areas. The AECS will rapidly and consistently verify the identity of authorized personnel, permitting them access to the secured area, while denying entry to unauthorized personnel. The AECS will have a flexible capability, employing various levels of identity verification using three levels of personal identification i.e., card/badge reader, Personal Identification Number (PIN) and a Personal Identity Verifier (PIV)). The methods of identification will vary with the type of area secured. High priority areas will typically employ all three levels of identification while one or more methods may be omitted in areas of lesser priority.

Non Developed Items (NDI) will be employed where possible, and development is expected to be confined to a systems integration effort.

STATUS AND SCHEDULE: A market investigation was completed in FY91 for the AECS. A system specification is being prepared. Documentation is in preparation for a system integration and production contract which is scheduled to be awarded in FY92. DT&E and OT&E is scheduled for late FY92. Initial Operational Capability (IOC) is projected for FY93.

Two related AECS projects, Ellsworth AFB and TRIGS, were worked in parallel with the standard AECS program and are essentially identical systems. The Ellsworth AECS is a concept definition system and is scheduled for installation in late FY91. The TRIGS AECS requirement was cancelled in 2QFY91.

PRODUCTION PLANNING: IOC is planned for FY93, with turnover of the first system following OT&E. Production of 34 systems is planned through FY97 at a cost of $29.7M (Air Force only).

PROBLEMS: None.

RDT&E
USAF BISS DISPERSED INTEGRATED SECURITY SYSTEM (DISS)

GENERAL DESCRIPTION: DISS is a transportable sensor system capable of detection, alarm reporting, assessment, communications and response. DISS will be rapidly deployable, modular and capable of operating over a wide range of mission types against varying threats. The DISS program encompasses both Air Base Ground Defense and relocatable individual resource protection requirements. Major elements of DISS are: detection devices, thermal imagers, MIDAS/VISDTA, display devices, a light armored vehicle (by others), delay/denial systems (when available), an airborne detection system, an Engagement Simulation System (ESS), and radio communications equipment.

STATUS AND SCHEDULE: This is a new program with three distinct elements. The first element addresses the relocatable individual resource protection requirement using a complement of relocatable sensors. The relocatable sensor project is included under the umbrella of DISS but will be managed as a separate project. A contract for integration of commercial or NDI products is scheduled for award in early FY92. Production is scheduled for early FY93. IOC is scheduled for late FY93

The second element addresses the requirement for an intrusion detection and assessment systems for use in a dispersal mode application. Candidate hardware includes MIDS and military night vision aids. Work is under way which will yield a production contract in FY92 for the intrusion detection system. This project is included under the umbrella of DISS but will be managed as a separate project. The night vision equipment will be acquired through the Army on a matching schedule. IOC is scheduled for FY94.

The third element is a complete capability system integration effort. A separate contract will be awarded in late FY92 to produce the complete required system using commercial and developed components, including those available through the other elements of the DISS program. IOC is scheduled for FY96.

PRODUCTION PLANNING: To be accomplished in FSD (third element).

PROBLEMS: Program should be started in FY91, but will be delayed until FY92 because of funding constraints.

RDT&E
USAF BISS AIRCRAFT EMBEDDED SECURITY SYSTEM (AESS)

GENERAL DESCRIPTION: This is to be a system of sensors which are built in to the airframe of various aircraft, drawing their power from either the aircraft's or their own batteries and eliminating the need for security forces to be in close proximity to the aircraft. The system is armed and accessed by the aircrew. Intruders attempting to gain access to or tamper with the aircraft will be detected by the sensors, and an alarm automatically radioed to a remote annunciator.

STATUS AND SCHEDULE: A full-scale development project is scheduled to begin in FY95, emphasizing the integration of NDI equipment. Tests will be conducted to determine the effectiveness, cost penalties, and weight penalties.

PRODUCTION PLANNING: To be accomplished during FSD.

PROBLEMS: None

RDT&E
USAF BISS BASE & INSTALLATION ENTRY CONTROL SYSTEM (BIECS)

GENERAL DESCRIPTION: This system will provide a means of automatically identifying authorized vehicles and personnel through identity devices such as bar code decals, magnetic stripe ID cards, proximity cards, etc. Vehicle control will be accomplished by lane markings, traffic lights, gates, etc. Visitors will be handled at a separate entry point to facilitate entry/exit by regular base personnel. Use of NDI equipment will be maximized. The BIECS project is related to the current AECS program.

STATUS AND SCHEDULE: An R&D effort to determine the most viable methods and equipment will be started in FY98.

PRODUCTION PLANNING: To be accomplished during FSD.

PROBLEMS: None.

RDT&E
USAF BISS THERMAL IMAGER SYSTEMS

GENERAL DESCRIPTION: This program responds to the operational need for night vision capability expressed in the Draft JSOR for Thermal Imagers and Thermal Weapons Sights. This program is related to the DISS Program in that products developed here will be directly useable for the DISS mission. The systems produced by the Thermal Imager Program will provide passive imaging equipment for improved surveillance, target detection, target tracking, and target assessment. The program will make maximum use of existing or new production military equipment when available or, alternately, commercial systems. The program will be conducted in a phased approach, the first to integrate the Low Cost Uncooled Sensor Program (LOCUSP) imagers into common physical security applications for Closed Circuit Television (CCTV) equipment. The second phase will apply LOCUSP imagers to development systems such as the Mobile Intrusion Detection and Assessment System (MIDAS). A P3I approach to production and product upgrades will be applied to the program. This program will incorporate the follow-on development effort for the DNA MIDAS project.

STATUS AND SCHEDULE: This is a new program. Documentation will be prepared in FY92 for a system integration and production contract which is scheduled to be awarded in FY93. DT&E and OT&E will be conducted as major subsystems become ready. Initial Operational Capability (IOC) for the CCTV application is projected for FY93.

PRODUCTION PLANNING: To be accomplished during FSD.

PROBLEMS: None.

RDT&E
USAF BISS ELECTRONIC ENGAGEMENT SYSTEMS (ESS)

GENERAL DESCRIPTION: This program responds to the operational need for a force on force training system for use by personnel who perform physical security duties for the Air Force. The requirement for this system is expressed in the "Operations Concept for Integrated Tactical Security System," 21 Feb 1990. This is a training system based on, the DNA Tactical Engagement Simulation System (TESS) project. The ESS equipment is based on an eye-safe Class I laser optical device. It provides significant performance improvements over the presently used MILES system. The system simulates tactical engagement against adversaries. ESS will provide instant casualty notification, the ability to determine who shot whom and the time of the event. The equipment will provide the capability to include personnel and fixed emplacements in exercises. Remote reset capability of ESS equipment is also provided.

STATUS AND SCHEDULE: This is a new program. In FY91, a small effort was completed to compare TESS with commercially available systems. The results will be reviewed by users. The remainder of the project schedule will be determined by the results of the review. Based on the review recommendations, an acquisition project will be initiated in FY92 to procure either the TESS equipment or a commercial system with the best match to the operational requirement.

PRODUCTION PLANNING: To be accomplished as a part of FY92 acquisition effort.

PROBLEMS: None.

RDT&E
USAF BISS AIRBORNE DETECTION SYSTEM (ADS)

GENERAL DESCRIPTION: This is a system which is capable of detecting airborne, low radar cross section targets advancing on sites and facilities in which it is operating. The system must detect ultralight aircraft, hang-gliders, para- sails and parachutists and provide at least 30 seconds warning time. The system must be man portable, operate in the full military exterior environment, and provide for remote monitoring capability.

STATUS AND SCHEDULE: A full-scale development project is scheduled to begin in FY95. It is anticipated that the development program will consist of systems integration effort which concentrates on fusion of NDI military or commercial components.

PRODUCTION PLANNING: To be accomplished during FSD.

PROBLEMS: None

PHYSICAL SECURITY EQUIPMENT

UNITED STATES AIR FORCE

COLONEL ANDREW CORSO

PHYSICAL SECURITY EQUIPMENT CHART A

USAF BASE & INSTALLATION SECURITY SYSTEM RDT&E PROGRAM ($ IN THOUSANDS)

PROGRAMS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. STANDARD & SMALL ANNUNCIATORS	(6.3)									
	(6.4)	910								910
2. ADVANCED ENTRY CONTROL SYSTEM	(6.3)									
	(6.4)	2615	2384	752	492					6243
3. DISPERSED INTEGRATED SECURITY SYSTEMS	(6.3)									
	(6.4)	1759	2324	3156	2669	1369				10831
4. THERMAL IMAGER SYSTEMS	(6.3)			1000						1000
	(6.4)	516	846	892	2839	4412	2580	1082	1000	14167
5. ELECTRONIC ENGAGEMENT SYSTEM	(6.3)									
	(6.4)		446	200						646
6. AIRBORNE DETECTION SYSTEM	(6.3)									
	(6.4)					396	1759	2459	2500	7114
7. AIRCRAFT EMBEDDED SECURITY SYSTEM	(6.3)									
	(6.4)					269	1661	2459	1659	6048
8. BASE & INSTALLATION ENTRY CONTROL SYSTEM	(6.3)									
	(6.4)								841	841
SUBTOTALS	(6.3)			1000						1000
	(6.4)	5800	6000	5000	6000	6000	6000	6000	6000	46800
GRAND TOTAL		5800	6000	6000	6000	6000	6000	6000	6000	47800

PHYSICAL SECURITY EQUIPMENT CHART B

USAF BISS STANDARD AND SMALL ANNUNCIATOR RDT&E PROGRAM ($ IN MILLIONS)

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. CRT GRAPHIC DISPLAY MINOR SOFTWARE MOD MECHANICAL REDESIGN	(6.3) (6.4)	.462								.462
2. PMRT PREPARATION ACTIONS	(6.3) (6.4)	.448								.448
SUBTOTALS	(6.3) (6.4)	.910								.910
GRAND TOTAL		.910								.910

PHYSICAL SECURITY EQUIPMENT CHART B

USAF BISS ADVANCED ENTRY CONTROL SYSTEM RDT&E PROGRAM ($ IN MILLIONS)

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. DOD STANDARD SPECIFICATION	(6.3) (6.4)	.400								.400
2. PROOF OF CONCEPT DEMONSTRATION (ELLSWORTH)	(6.3) (6.4)	.367								.367
3. ACQUISITION PROGRAM DOCUMENTATION/ SUPPORT	(6.3) (6.4)	1.613	.434	.352	.317					2.716
4. CONTRACT AWARD	(6.3) (6.4)		1.700	.350	.150					2.200
5. INSTALLATION AND TEST	(6.3) (6.4)	.235	.250	.050	.025					.560
SUBTOTALS	(6.3) (6.4)	2.615	2.384	.752	.492					6.243
GRAND TOTAL		2.615	2.384	.752	.492					6.243

PHYSICAL SECURITY EQUIPMENT CHART B

USAF BISS DISPERSED INTEGRATED SECURITY SYSTEM RDT&E PROGRAM ($ IN MILLIONS)

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. RELOCATABLE SENSOR SYSTEM	(6.3) (6.4)	.717	.585	.431						1.733
2. CORE EQUIPMENT INTEGRATION (PHASE 1) PROGRAM SUPPORT	(6.3) (6.4)	.907	.456	.177						1.540
3. NDI EQUIPMENT INTEGRATION (PHASE 2) PROGRAM SUPPORT	(6.3) (6.4)		.323	.423	.423	.623				1.792
4. CONTRACT AWARD (PHASE 1)	(6.3) (6.4)		.750	.500						1.250
5. CONTRACT AWARD (PHASE 2)	(6.3) (6.4)			1.500	1.746	.250				3.496
6. TESTING (PHASE 1)	(6.3) (6.4)	.135	.200	.100						.435
7. TESTING (PHASE 2)	(6.3) (6.4)		.010	.025	.500	.050				.585
SUBTOTALS	(6.3) (6.4)	1.759	2.324	3.156	2.669	.923				10.831
GRAND TOTAL		1.759	2.324	3.156	2.669	.923				10.831

PHYSICAL SECURITY EQUIPMENT

CHART B

USAF BISS THERMAL IMAGER SYSTEMS RDT&E PROGRAM ($ IN MILLIONS)

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. VIDSTA ADVANCED DEVELOPMENT CONTRACT	(6.3)									
	(6.4)	.292								.292
2. LOCUSP INTEGRATION	(6.3)									
	(6.4)		.500	.269						.769
3. LOCUSP/MIDAS PROGRAM SUPPORT	(6.3)									
	(6.4)	.194	.196	.423	.423	.623	.623	.423	.423	3.328
4. MIDAS DEVELOPMENT	(6.3)			1.000						1.000
	(6.4)				2.216	3.589	1.757	.659	.577	8.798
5. LOCUSP/MIDAS TESTING	(6.3)									
	(6.4)	.030	.150	.200	.200	.200	.200			.9800
SUBTOTALS	(6.3)			1.000						1.000
	(6.4)	.516	.846	.892	2.839	4.412	2.580	1.082	1.000	14.167
GRAND TOTAL		.516	.846	1.892	2.839	4.412	2.580	1.082	1.000	15.167

PHYSICAL SECURITY EQUIPMENT CHART B

USAF BISS ELECTRONIC ENGAGEMENT SYSTEMS RDT&E PROGRAM ($ IN MILLIONS)

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. AIR FORCE LOGISTIC SUPPORT	(6.3) (6.4)		.246							.246
2. TESTING	(6.3) (6.4)		.200	.200						.400
SUBTOTALS	(6.3) (6.4)		.446	.200						.646
GRAND TOTAL			.446	.200						.646

PHYSICAL SECURITY EQUIPMENT CHART B

USAF BISS AIRCRAFT EMBEDDED SECURITY SYSTEM RDT&E PROGRAM ($ IN MILLIONS)

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. PROGRAM SUPPORT	(6.3)									
	(6.4)					.259	.259	.259	.259	1.036
2. TESTING	(6.3)									
	(6.4)					.010	.025	.200		.235
3. SYSTEM INTEGRATION	(6.3)									
	(6.4)						1.377	2.000	1.400	4.777
SUBTOTALS	(6.3)									
	(6.4)					.269	1.661	2.459	1.659	6.048
GRAND TOTAL						.269	1.661	2.459	1.659	6.048

PHYSICAL SECURITY EQUIPMENT CHART B

USAF BISS AIRBORNE DETECTION SYSTEM RDT&E PROGRAM ($ IN MILLIONS)

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. PROGRAM SUPPORT	(6.3)									
	(6.4)					.261	.259	.259	.259	1.038
2. TESTING	(6.3)									
	(6.4)					.135		.200	.200	.535
3. SYSTEM INTEGRATION CONTRACT	(6.3)									
	(6.4)						1.500	2.000	2.041	5.541
SUBTOTALS	(6.3)									
	(6.4)					.396	1.759	2.459	2.500	7.114
GRAND TOTAL						.396	1.759	2.459	2.500	7.114

PHYSICAL SECURITY EQUIPMENT CHART B

USAF BISS BASE & INSTALLATION CONTROL SYSTEM RDT&E PROGRAM ($ IN MILLIONS)

PROJECTS		FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. REQUIREMENTS AND MISSION ANALYSIS	(6.3) (6.4)								.156	.156
2. NDI SYSTEMS ADAPTATION	(6.3) (6.4)								.685	.685
SUBTOTALS	(6.3) (6.4)								.841	.841
GRAND TOTAL									.841	.841

PHYSICAL SECURITY EQUIPMENT CHART C

USAF BISS PROCUREMENT ($ IN MILLIONS)

*COST/BUDGETED

TYPE OF EQUIPMENT/SYSTEM	NUMBER OF SETS	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. AF ANNUNCIATOR										
A. STANDARD	2	.24/.24								.24/.24
B. SMALL	7	.28/.28	.88/.88	.91/.91						2.1/2.1
2. ARMY ICIDS										
A. STANDARD	48			.60/.60	2.2/0	1.6/0	4.3/0	5.5/0		14.2/.60
B. SMALL	29			.24/.24	.62/0	.78/.0	1.2/0	.96/0		3.1/.24
3. AF AECS										
A. PRIORITY A	16			.82/.82	2.6/2.6	5.2/0	3.6/0	1.9/0		14.1/3.4
B. PRIORITY B	5				.81/0	.84/0		2.7/0		4.3/0
C. PRIORITY C	13				1.9/0	.73/0	3.3/0	5.1/0		11.3/0
4. RELOCATABLE SENSORS										
A. RELOCATABLE SENSOR SYSTEM (NDI)	488		.88/.88	1.0/1.0	1.0/0	1.0/0	1.0/0			4.9/1.9

PHYSICAL SECURITY EQUIPMENT — CHART C

USAF BISS PROCUREMENT ($ IN MILLIONS)

*COST/BUDGETED

TYPE OF EQUIPMENT/SYSTEM (CONT)	NUMBER OF SETS	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
B. OTHER RELOCATABLE SENSORS	504	.67/.41	1.2/.76	1.2/.98	1.3/.50	1.4/.80	1.8/1.2	2.4/1.5	TBD	10.0/6.2
5. THERMAL IMAGER SYSTEMS										
A. THERMAL IMAGERS	36		.61/.61	.47/.47	.50/.50	.85/.85	.60/.60	.90/.90	TBD	4.0/4.0
B. MOBILE INTRUSION DETECTION SYSTEM	TBD									
6. ELECTRONIC ENGAGEMENT SYSTEMS	688					1.4/1.1	1.0/.77	1.0/.76	TBD	3.4/2.6
7. AIRBORNE DETECTION SYSTEM	TBD									
8. AIRCRAFT EMBEDDED SECURITY SYSTEM	TBD									
9. BASE & INSTALLATION ENTRY CONTROL SYSTEM	TBD									
TOTAL FUNDS COST		1.2	3.6	5.2	10.9	13.8	16.8	20.5	TBD	72.2
BUDGETED		.9	3.1	5.0	3.6	2.7	2.6	3.2	TBD	21.2

PHYSICAL SECURITY EQUIPMENT CHART D

USAF BISS INSTALLATIONS/PLATFORMS ($ IN MILLIONS)

*FUNDS REQUIRED/BUDGETED

TYPE OF EQUIPMENT/ PSE SYSTEMS	NUMBER OF INSTALLAION/ PLATFORMS	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
1. AF ANNUNCIATOR										
A. STANDARD	2	.24/.24								.24/.24
B. SMALL	7	.28/.28	.88/.88	.91/.91						2.1/2.1
2. ARMY ICIDS										
A. STANDARD	48			.60/.60	2.2/0	1.6/0	4.3/0	5.5/0		14.2/.60
B. SMALL	29			.24/.24	.62/0	.78/.0	1.2/0	.96/0		3.1/.24
3. AF AECS										
A. PRIORITY A	16			.82/.82	2.6/2.6	5.2/0	3.6/0	1.9/0		14.1/3.4
B. PRIORITY B	5				.81/0	.84/0		2.7/0		4.3/0
C. PRIORITY C	13				1.9/0	.73/0	3.3/0	5.1/0		11.3/0
4. RELOCATABLE SENSORS										
A. RELOCATABLE SENSOR SYSTEM (NDI)	122		.88/.88	1.0/1.0	1.0/0	1.0/0	1.0/0			4.9/1.9

PHYSICAL SECURITY EQUIPMENT CHART D

USAF BISS INSTALLATION/PLATFORMS ($ IN MILLIONS)

*FUNDS REQUIRED/BUDGETED

TYPE OF EQUIPMENT/SYSTEM (CONT)	NUMBER OF SETS	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	SUBTOTAL
B. OTHER RELOCATABLE SENSORS	504	.67/.41	1.2/.76	1.2/.98	1.3/.50	1.4/.80	1.8/1.2	2.4/1.5	TBD	10.0/6.2
5. THERMAL IMAGER SYSTEMS										
A. THERMAL IMAGERS	36		.61/.61	.47/.47	.50/.50	.85/.85	.60/.60	.90/.90	TBD	4.0/4.0
B. MOBILE INTRUSION DETECTION SYSTEM	TBD									
6. ELECTRONIC ENGAGEMENT SYSTEMS	688					1.4/1.1	1.0/.77	1.0/.76	TBD	3.4/2.6
7. AIRBORNE DETECTION SYSTEM	TBD									
8. AIRCRAFT EMBEDDED SECURITY SYSTEM	TBD									
9. BASE & INSTALLATION ENTRY CONTROL SYSTEM	TBD									
TOTAL FUNDS COST		1.2	3.6	5.2	10.9	13.8	16.8	20.5	TBD	72.2
BUDGETED		.9	3.1	5.0	3.6	2.7	2.6	3.2	TBD	21.2

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION

	A # Required	B # Implemented	C #Not Implemented	D # At Issue
MANAGEMENT OPTIONS				
RDT&E Programs	9	3	2	4
Procurement Programs	8	7	1	0
SUMMARY ACTIONS				
TOTAL	17	10	3	4

Estimated Completion Dates (of Column C)

50% Completion Date	FY94
75% Completion Date	FY98
100% Completion Date	FY99

Note: Columns B+C+D=A

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
PARTIALLY IMPLEMENTED ITEMS

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	ESTIMATED COMPLETION DATE
1. STANDARD AND SMALL ANNUNCIATOR	3.1.11	C-3-4	Completing documentation for PMRT	FY91
1. ADVANCED ENTRY CONTROL SYSTEM	3.1.1	C-3-1	Contract award for procurement	FY92
2. DISPERSED INTEGRATED SECURITY SYSTEM (portable line sensor)	3.1.5	C-3-2	Contract award for procurement	FY93
3. THERMAL IMAGER SYSTEMS	3.1.7	C-3-3	Acquisition plan for systems Potentially transition MIDAS	FY92 FY93
4. ELECTRONIC ENGAGEMENT SYSTEMS			Test commercial systems and coordinate logistics support	FY93
5. AIRBORNE DETECTION SYSTEM			MAJCOM funding begins FY92	FY97
6. ACTIVE PROTECTION SYSTEMS	3.1.9	C-3-3	MAJCOM funding begins FY92	FY98

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
OVERCOME BY EVENTS

NUMBER, SHORT TITLE OR DESCRIPTION	OPTION NUMBER (OR SUMMARY)	PAGE	REMARKS	DATE OF DETERMINATION
1. AIRCRAFT EMBEDDED SECURITY SYSTEM			NO FORMAL REQUIREMENTS	FY90
2. BASE & INSTALLATION ENTRY CONTROL SYSTEM	3.1.2	C-3-1	NO FORMAL REQUIREMENTS	FY90
3. THERMAL IMAGERY	3.1.7	C-3-2	MIDAS - WAITING FOR RESULTS OF DETECTABILITY STUDY	FY92
4. ADVANCED PERSONNEL/ VEHICLE INSPECTION SYSTEMS	3.1.3	C-3-2	NO FORMAL REQUIREMENTS	FY90

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : ADVANCED ENTRY CONTROL SYSTEMS (AECS)

Management Option or Action : THIS PROGRAM WILL PROVIDE A STANDARDIZED AECS FOR DOD RESOURCES, TO INCLUDE PRIORITY A, B AND C RESOURCES. SYSTEM SPECIFICATIONS WILL BE COMPLETED FY91; THE RFP WILL BE RELEASED AND A CONTRACT AWARDED FY92.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : PRIORITY A REDUNDANT ANNUNCIATOR PROGRAM

Management Option or Action : THIS PROGRAM HAS BEEN TERMINATED PENDING EVALUATION OF THE ABILITY OF THE ARMY ICIDS PROGRAM TO FULFILL THIS REQUIREMENT.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : MOBILE INTRUSION DETECTION AND ASSESSMENT SYSTEM (MIDAS)

Management Option or Action : RENAMED THERMAL IMAGER SYSTEMS. THIS PROGRAM INCLUDES LOW COST THERMAL IMAGERS AND MIDAS. MIDAS IS FUNDED THROUGH THE DNA EXPLORATORY PROGRAM WITH EXPECTED TRANSITION TO THE AIR FORCE FY93. TRANSITION TO THE AIR FORCE FOR ADVANCED DEVELOPMENT HINGES ON THE RESULTS OF THE DETECTABILITY STUDY SCHEDULED TO BE COMPLETED DEC 91. THE AIR FORCE WILL TRANSITION THE PROGRAM IF MIDAS CAN MEET USER REQUIREMENTS. THIS PROGRAM WILL ALSO ASSESS THE CAPABILITY OF LOW COST THERMAL IMAGERS FOR INTEGRATION INTO DISPERSED INTEGRATED SECURITY SYSTEMS.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : ACTIVE PROTECTION SYSTEMS (APS)

Management Option or Action : THIS PROGRAM NOW INCLUDES DELAY AND DENIAL SYSTEMS. THERE IS NO BISS FUNDING CURRENTLY FOR THIS TECHNOLOGY; HOWEVER, MAJCOM DOLLARS FOR R&D WILL BE AVAILABLE STARTING FY94 TO CONTINUE ON-GOING RESEARCH IF TECHNOLOGY PROVES PROMISING.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : MICRO LASER DELAY AND DENIAL SYSTEM (MLDD)

Management Option or Action : THIS PROGRAM IS NOW INCLUDED IN ACTIVE PROTECTION SYSTEMS (PREVIOUS SLIDE).

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : ELECTRONIC ENGAGEMENT SYSTEMS

Management Option or Action : PREVIOUSLY CALLED TACTICAL ENGAGEMENT SIMULATION SYSTEM. THE ARMY MILES II PROGRAM MAY MEET MOST OF THE REQUIREMENTS; THE AIR FORCE WILL CONDUCT TESTS TO DETERMINE IF MILES II CAN MEET IDENTIFIED REQUIREMENTS.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : PRIORITY B & C INTERIM ANNUNCIATOR PROGRAM

Management Option or Action : RENAMED STANDARD AND SMALL ANNUNCIATOR PROGRAM. THIS PROGRAM PROVIDES STANDARDIZED ANNUNCIATORS TO AIR FORCE USERS UNTIL ICIDS BECOMES AVAILABLE THROUGH THE ARMY. THIS PROGRAM IS CURRENTLY SCHEDULED TO BE TERMINATED FY91.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : VIDEO MOTION DETECTION (VMD)

Management Option or Action : VMD TECHNOLOGIES MAY PROVIDE UNIQUE POSSIBLITIES AT ENHANCING THE DETECTION AND ASSESSMENT OF USAF RESTRICTED AREA PERIMETERS; HOWEVER, THERE ARE CURRENTLY NO FORMAL REQUIREMENTS FOR THIS SPECIFIC TECHNOLOGY. THE DISS PROGRAM MAY INCLUDE VMD TECHNOLOGY.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : PORTABLE LINE SENSOR

Management Option or Action : RENAMED RELOCATABLE SENSOR SYSTEM; THIS SENSOR IS INCLUDED IN DISS. THIS SYSTEM IS CAPABLE OF BEING EMPLOYED IN A SEMI-PERMANENT OR PORTABLE MODE TO PROVIDE PROTECTION FOR HIGH-VALUE AND/OR SENSITIVE RESOURES. PROGRAM START REVIEW IS SCHEDULED FOR FY91 WITH PLANS FOR AN FY92 CONTRACT AWARD FOR COMMERCIAL NDI SENSORS.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : ADVANCED PERSONNEL/VEHICLE INSPECTION SYSTEMS

Management Option or Action : THIS PROJECTED EFFORT TO DEVELOP SYSTEMS TO IMPROVE USAF SEARCH OPERATIONS OF PERSONNEL AND VEHICLES ENTERING OR EXITING NUCLEAR RESTRICTED AREAS HAS BEEN PLACED ON HOLD PENDING IDENTIFICATION OF FORMAL REQUIREMENTS.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : VIDEO IMAGING SYSTEM FOR DETECTION TRACKING AND ASSESSMENT (VISDTA)

Management Option or Action : THIS PROGRAM TO USE THERMAL IMAGERY AS DETECTORS HAS BEEN COMBINED WITH THE DNA MIDAS PROGRAM.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : INTEGRATED TACTICAL SECURITY SYSTEM (ITSS)

Management Option or Action : RENAMED DISPERSED INTEGRATED SECURITY SYSTEM (DISS). DISS IS AN ATTEMPT TO INTEGRATE COMMERCIALLY AVAILABLE RELOCATABLE SECURITY SYSTEM COMPONENTS TO SECURE LATERALLY DISPERSED WEAPON SYSTEMS AND RESOURCES, LARGE SCALE DEPLOYMENTS, AND INDIVIDUAL RESOURCE PROTECTION. PRODUCT SPECIFICATIONS WILL BE ACCOMPLISHED FY91; ACQUISITION PROGRAM WILL BE IMPLEMENTED FY92.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : BASE ENTRY CONTROL SYSTEM (BECS)

Management Option or Action : RENAMED BASE & INSTALLATION ENTRY CONTROL SYSTEM (BIECS). THIS PROGRAM TO CONDUCT RESEARCH FOR STATE-OF-THE-ART TECHNOLOGIES TO AUTOMATE ENTRY AND VISITOR ACCESS TO AIR FORCE INSTALLATIONS DOES NOT MEET PROGRAM FUNDING LINE.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program (or Summary) : TRANSPORTABLE INTRUSION DETECTION SENSOR

Management Option or Action : THIS PROGRAM IS NOW INCLUDED IN DISPERSED INTEGRATED SECURITY SYTEMS.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program: Perimeter and Exterior Systems

Management Option: or Action This program installs buried line, and fence sensors as new or upgrades for priority resources. The program extends beyond the SYDP, and is supported by all Major Commands.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program:	Aircraft Shelter Sensor Systems
Management Option: or Action	Provides a suite of BISS and NDI equipment to protect priority aircraft in closed shelters. Project is well underway in USAFE and PACAF.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program:	Total Requirement Installations
Management Option: or Action	On-going program providing all sensor equipment required for a weapon system or specific need, i.e. all sensors and C3I for the B-2. Supported by MAJCOMs.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program: Interior Structure Security Systems

Management Option: or Action Continuing program to provide BISS or COTS/NDI interior sensors for Maintenance and Inspection Buildings, Igloos, and Integrated Maintenance Facilities. Supported by MAJCOMs.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program:	Decentralized Funding Objectives (formerly V)
Management Option: or Action	On-going program which allows MAJCOMs to accelerate requirements by providing funding outside centrally funded program, while using the central program to provide logistics, planing and engineering. An example is the USAFE initiative to protect Precision guided munitions more quickly by funding installations.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program: Dispersed Integrated Security System

Management Option: or Action On-going program to acquire BISS and COTS/NDI equipment for portable and relocateable applications. Supported by MAJCOMS.

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program: Automated Entry Control System

Management Option: or Action The ESE portion of the BISS AECS R&D effort. Presently supported by several MAJCOMs, with expected POM funding action at first opportunity (FY 94 POM)

AIR FORCE
DOD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
Issue Management Options/Actions

Title of Program: Annunciator Installations

Management Option: or Action On-going program to replace SPCDS and to provide needed new annunciator requirements. This program purchases ARMY ICIDS annunciators and installs them at USAF sites.

Program Name: ADV ENTRY CONTROL SYSTEM

Service Priority		1.20
Strategic Value of Asset		1.00
Threat Level		1.00
Asset Vulnerability		1.00
Joint Service Operational Requirement	Pending Approval	
Single Service Operational Requirement	Approved	
Tentative Operational Requirement	Approved	
Acquisition Commitment	ONE service only	
Item Category	Nondevelopmental Item	
Previous RDT&E	Continue	
DOD 6.3/6.4 Costs to Date		2470
Funds Requested this FY		2615
Follow-on RDT&E Costs		3628
Total		8713
Acquisition Quantity		34
Unit Acquisition Cost		858000
Years to Complete RDT&E		3.00
Probability of Success		99.00
Technical Risk		0.01

DOD Value: 77.93

FY	6.3 Funding	6.4 Funding	Total
1990			
1991			
1992			
1993			
1994			
Totals			

Program Name: THERMAL MAGER SYSTEMS

Service Priority	1.40
Strategic Value of Asset	1.30
Threat Level	1.30
Asset Vulnerability	1.30
Joint Service Operational Requirement	Pending Approval
Single Service Operational Requirement	Pending Approval
Tentative Operational Requirement	Pending Approval
Acquisition Commitment	TWO or more services
Item Category	Nondevelopmental Item
Previous RDT&E	Continue

DOD 6.3/6.4 Costs to Date	0
Funds Requested this FY	516
Follow-on RDT&E Costs	14651
Total	15167
Acquisition Quantity	36
Unit Acquisition Cost	110000
Years to Complete RDT&E	8.00
Probability of Success	80.00
Technical Risk	20.00

DOD Value: 66.43

FY	6.3 Funding	6.4 Funding	Total
1990			
1991			
1992			
1993			
1994			
Totals			

Program Name: DISPERSED INTEG SEC SYS

Service Priority		1.30
Strategic Value of Asset		1.30
Threat Level		1.00
Asset Vulnerability		1.00
Joint Service Operational Requirement	Pending Approval	
Single Service Operational Requirement	Pending Approval	
Tentative Operational Requirement	Pending Approval	
Acquisition Commitment	ONE service only	
Item Category	Nondevelopmental Item	
Previous RDT&E	Continue	
DOD 6.3/6.4 Costs to Date		275
Funds Requested this FY		1759
Follow-on RDT&E Costs		9272
Total		11306
Acquisition Quantity		992
Unit Acquisition Cost		15000
Years to Complete RDT&E		6.00
Probability of Success		90.00
Technical Risk		10.00

DOD Value: 65.55

FY	6.3 Funding	6.4 Funding	Total
1990	0		
1991			
1992			
1993			
1994			
Totals			

Program Name: ELECTRONIC ENGAGEMENT SYS

Service Priority	2.00
Strategic Value of Asset	1.80
Threat Level	1.80
Asset Vulnerability	2.00
Joint Service Operational Requirement	Pending Approval
Single Service Operational Requirement	Pending Approval
Tentative Operational Requirement	Pending Approval
Acquisition Commitment	TWO or more services
Item Category	Nondevelopmental Item
Previous RDT&E	Continue

DOD 6.3/6.4 Costs to Date	0
Funds Requested this FY	0
Follow-on RDT&E Costs	646
Total	646

Acquisition Quantity	688
Unit Acquisition Cost	5000
Years to Complete RDT&E	1.00
Probability of Success	99.00
Technical Risk	1.00

DOD Value: 63.87

FY	6.3 Funding	6.4 Funding	Total
1990			
1991			
1992			
1993			
1994			
Totals			

Program Name: STAND & SMALL ANNUN

Service Priority	1.00
Strategic Value of Asset	1.00
Threat Level	2.00
Asset Vulnerability	1.00
Joint Service Operational Requirement	Not Applicable
Single Service Operational Requirement	Approved
Tentative Operational Requirement	Approved
Acquisition Commitment	ONE service only
Item Category	Developmental Item
Previous RDT&E	Continue
DOD 6.3/6.4 Costs to Date	2410
Funds Requested this FY	910
Follow-on RDT&E Costs	0
Total	3320
Acquisition Quantity	9
Unit Acquisition Cost	257000
Years to Complete RDT&E	1.00
Probability of Success	100.00
Technical Risk	0.00

DOD Value: 63.62

FY	6.3 Funding	6.4 Funding	Total
1990			
1991			
1992			
1993			
1994			
Totals			

Program Name: AIRBORNE DETECTION SYS

Service Priority		2.20
Strategic Value of Asset		1.30
Threat Level		1.30
Asset Vulnerability		1.30
Joint Service Operational Requirement	Pending Approval	
Single Service Operational Requirement	Approved	
Tentative Operational Requirement	Approved	
Acquisition Commitment	ONE service only	
Item Category	Developmental Item	
Previous RDT&E	New	
DOD 6.3/6.4 Costs to Date		0
Funds Requested this FY		0
Follow-on RDT&E Costs		7114
Total		7114
Acquisition Quantity		0
Unit Acquisition Cost		
Years to Complete RDT&E		4.00
Probability of Success		85.00
Technical Risk		15.00

DOD Value:

FY	6.3 Funding	6.4 Funding	Total
1990			
1991			
1992			
1993			
1994			
Totals			

Program Name: AIRCRAFT EMBEDDED SEC SYS

Service Priority		3.00
Strategic Value of Asset		2.00
Threat Level		1.80
Asset Vulnerability		1.80
Joint Service Operational Requirement	Pending Approval	
Single Service Operational Requirement	Pending Approval.	
Tentative Operational Requirement	Pending Approval	
Acquisition Commitment	NONE	
Item Category	Nondevelopmental Item	
Previous RDT&E	New	
DOD 6.3/6.4 Cost to Date		0
Funds Requested this FY		0
Follow-on RDT&E Costs		6048
Total		6048
Acquisition Quantity		
Unit Acquisition Cost		
Years to Complete RDT&E		4.00
Probability of Success		90.00
Technical Risk		10.00

DOD Value:

FY	6.3 Funding	6.4 Funding	Total
1990			
1991			
1992			
1993			
1994			
Totals			

Program Name: BASE AND INSTALLATION ECS

Service Priority		2.90
Strategic Value of Asset		2.00
Threat Level		2.50
Asset Vulnerability		2.50
Joint Service Operational Requirement	Pending Approval	
Single Service Operational Requirement	Pending Approval	
Tentative Operational Requirement	Pending Approval	
Acquisition Commitment	ONE service only	
Item Category	Nondevelopmental Item	
Previous RDT&E	New	
DOD 6.3/6.4 Costs to Date		0
Funds Requested this FY		0
Follow-on RDT&E Costs		841
Total		841
Acquisition Quantity		
Unit Acquisition Cost		
Years to Complete RDT&E		2.00
Probability of Success		50.00
Technical Risk		80.00

DOD Value:

FY	6.3 Funding	6.4 Funding	Total
1990			
1991			
1992			
1993			
1994			
Totals			

Attachment G

DNA Presentation Charts

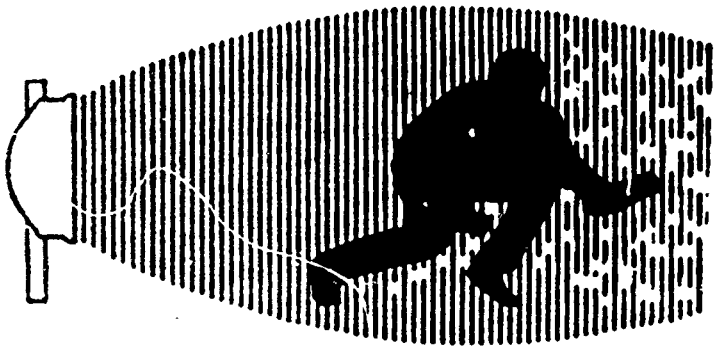
FY-1992 PRIORITIZATION LIST

16 April 1991

PRIORITY	PROJECT	BENEFITS	FUNDS ($K)
	JOINT/MULTI-SERVICE/CONTINUING SERVICE PROGRAMS		
1	ACTIVE DENIAL	AF/A/N/MC	1,623
2	PASSIVE MILLIMETER WAVE	N/A/AF/MC	556
3	SWIMMER IDENTIFICATION	N	556
4	SONIC DENIAL	A/AF/N	356
5	WATERSIDE LIGHTWEIGHT BARRIER	N	266
6	SHALLOW WATER INTRUSION DETECTION SYSTEM	N	540
	SERVICE NEW STARTS		
7	REMOTE SENSOR TEST DEVICE	A/AF/N/MC	100
8	IDAS/FLIGHT LINE SECURITY	AF/A/N/MC	260
9	NON-HARDWIRE/NON-RF DATA LINK	A/AF/N	170
10	ADVANCED THERMAL IMAGERY/ FOCAL PLANE ARRAY	AF/N/A	500
11	THERMAL IMAGERY/CCTV REPLACEMENT	AF/N/A	300
12	IDS FROM MOVING PLATFORM	A/AF	650
13	LASER DENIAL	AF/A	630
14	MODELING FOR PERSONNEL VERIFICATION	AF/A	200
	TOTAL 6.2 FUNDS PROGRAMMED		6,707

ACTIVE DENIAL

CONCEPT



DESCRIPTION

- Air Force (Statement of Operational need SAC 025-87)
- Develop technology for non-lethal, delay/denial systems
- New start in FY89 - four year developmental effort
- Uses advanced microwave technologies
- Will be used at storage sites/mobile missile systems.

STRATEGY/ISSUES

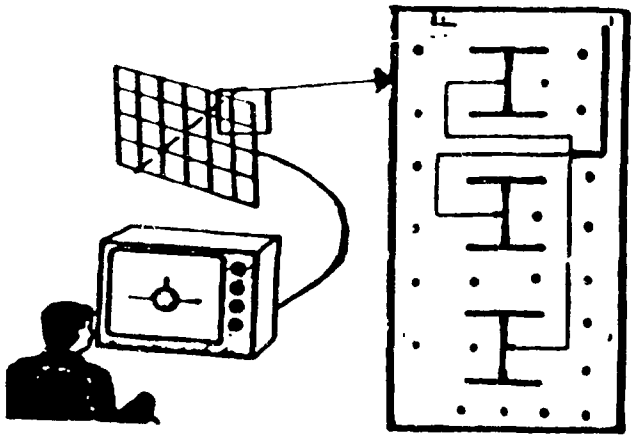
Concepts Development	FY89
Finalize JSOR by Services	FY90
Initiate evaluation/ Proof-of-Principle testing	FY90
Develop desired denial levels	FY91
Develop hardware	FY92
Transition to advanced engineering	FY93

FUNDING ($ M)

	FY89	FY90	FY91	FY92	FY93
6.2	1.1	1.156	1.98	1.65	1.6
	(.6)	(3.8)	(1.0)		
6.3 (AF)	0	0	.5	1.5	1.09

PASSIVE MILLIMETER WAVE SENSOR (PMWS)

CONCEPT



DESCRIPTION

SPONSOR: OP-09N

REQUIREMENT: SMALL, DURABLE, AND INEXPENSIVE ALTERNATE TO EXISTING PASSIVE SECURITY SYSTEMS

PERFORMER: APPLIED RESEARCH LABORATORIES, UNIV. OF TEXAS

DESCRIPTION: DEVELOP A DETECTOR THAT WOULD BE SMALL (2" X 2" X 0.1") AND COULD BE EASILY CONCEALED/ PROTECTED IN A HARSH ENVIRONMENT

DELIVERABLES: SMALL, INEXPENSIVE, PASSIVE MILLIMETER WAVE SENSOR FOR SHIPBOARD OR SHORE STATION USE.

STRATEGY

FY 90 - DETERMINE FEASIBILITY OF PMWS BEING MADE INEXPENSIVELY

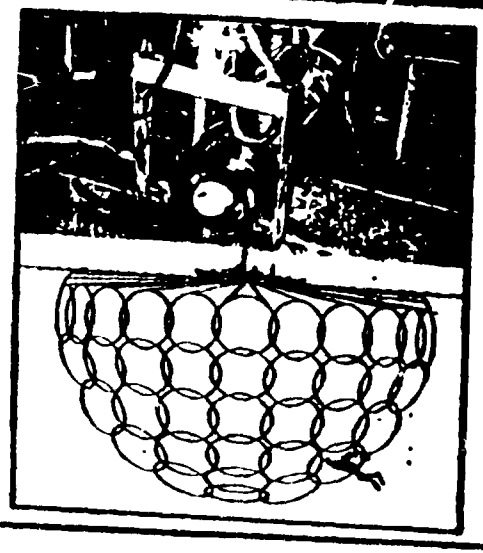
FY 91 - DETERMINE ANTENNA STRUCTURE
- DETERMINE CHARACTERISTICS OF TARGETS TO MAKE PROPER CHOICE OF RECEIVER PARAMETERS
- DETERMINE POSSIBLE CONFIGURATION COMPATIBLE WITH EXISTING FABRICATION TECHNOLOGY
- DETERMINE PERFORMANCE CHARACTERISTICS AND FABRICATION PROCEDURES
- TRANSITION TO 6.3 AFTER PROOF-OF-PRINCIPLE

FUNDING

FY 90	FY 91	FY 92
$50K	$500K	$500K

Swimmer Identification System (SIDS)

Concept



Description

Sponsor: OP-09N

Requirement: Autonomous alarm sonar swimmer detection and identification system

Performer: Naval Ocean Systems Center/Hawaii Lab, Applied Research Lab/UT, Applied Physics Lab/UW

Description: Autonomous alarm system which will alert shipboard and station personnel of the approach of surface and subsurface intruders

Deliverables: Swimmer identification technology.

Strategy/Issues

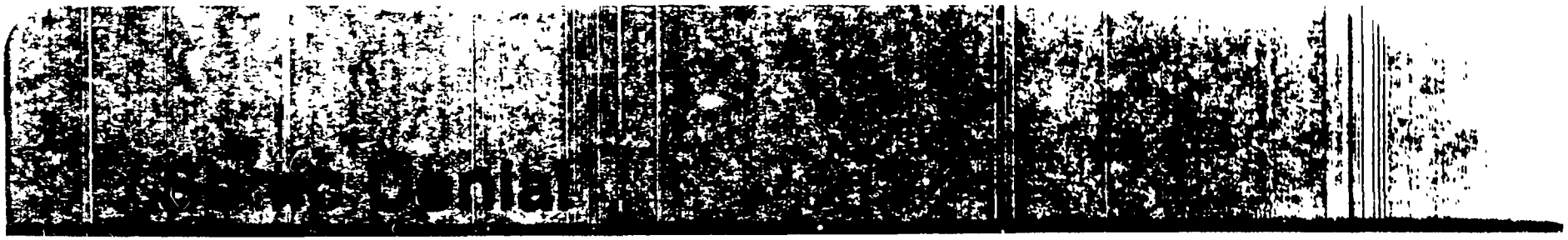
FY88 - Identified design requirements
- Initial mechanical/electrical work

FY89 - Established 3" lens capabilities
- Documented swimmer warfare trends
- Identified feature characteristics
- Identified motional parameters of human swimmers
- Develop signal processing algorithms

FY90 - Conduct data collection signatures
- Analyze signatures
- Initiate library of characteristics

Funding

FY88	FY89	FY90	FY91	FY92
210K	486K	755K	880K	290K



Requested: Investigate the use of non-audible sound as a non-lethal delay or denial system which could be used by the Army and, possibly, other Services.

Accomplishments:

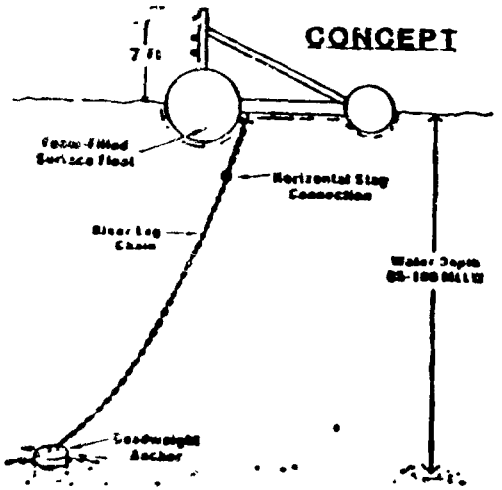
- This was a new start in FY-91, recently funded

Future Events:

- Determine the effects of non-audible sound on humans
- Develop a proof-of-concept delay/denial system
- Demonstrate the proof-of-concept delay denial system and transfer the project to the Army for 6.3 Advanced Engineering

WATERSIDE LIGHTWEIGHT BARRIER

CONCEPT



DESCRIPTION

SPONSOR: OP-09N

REQUIREMENT: LIGHTWEIGHT BARRIER THAT WILL STOP OR DELAY A HIGH-SPEED EXPLOSIVE-LADEN BOAT.

PERFORMER: NAVAL CIVIL ENGINEERING LAB

DESCRIPTION: A LIGHTWEIGHT BARRIER THAT WILL STOP OR SIGNIFICANTLY DELAY A HIGH-SPEED EXPLOSIVE-LADEN BOAT. IT IS DESIGNED TO INTEGRATE INTO THE WATERSIDE SECURITY SYSTEM.

STRATEGY/ISSUES

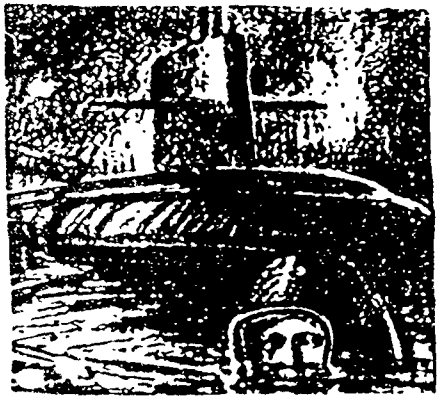
FY 88- COMMERICIALLY AVAILABLE BARRIER MATERIALS WERE INVESTIGATED.
FY 89- DEVELOPED DETAILS OF SELECTED BARRIER CONCEPTS AND COMPILE MATERIALS PERFORMANCE INFORMATION FOR SELECTED CONCEPTS.
FY 90- SELECT AND BEGIN FABRICATION OF PROTOTYPE BARRIER.
FY 91- COMPLETE BARRIER FABRICATION AND CONDUCT PROOF-OF-CONCEPT LESS ANCILLARY EQUIPMENT.
FY 92- DEVELOP GATES, MOORING, AND CONNECTORS.

FUNDING

FY 88	FY 89	FY 90	FY 91	FY 92
150K	254K	330K	180K	200K

SHALLOW WATER INTRUSION DETECTION SYSTEM (SWIDS)

CONCEPT



DESCRIPTION

SPONSOR: OP-09N

REQUIREMENT: Detect waterborne intruders in shallow waterways that surround protected assets.

PERFORMER: Naval Ocean Systems Center, San Diego

DESCRIPTION: Operational capability of a shallow water intruder detection sensor system for integration into the Waterside Security System (WSS)

DELIVERABLES: Trained system for WSS

STRATEGY/ISSUES

FY 91 - Sensor selection and evaluation
- Acquire animals and support equipment
- Commence basic training

FY 92 - Complete open water training
- Complete pier training
- Complete shallow water training
- Establish interface requirements with WSS

FY 93 - Complete advanced training
- System integration and evaluation
- Proof-of-principle demonstration
- Deliver trained system to Navy

FUNDING

FY 91	FY 92	FY93
510K	470K	545K

REMOTE SENSOR TEST DEVICE

CUSTOMER/FUNDING

USAF - Security Police
USA - ARDEC
NAVY - Naval Invest Service
Marines - NIS

FY 92 Funds - $125K

ISSUE

Through a very time consuming process, sensors are checked approximately once a month to ensure it is effective. This leaves large periods of time when sensors may be inoperative. A remotely operated test device would allow sensors to be validated at any time.

PRODUCT

A "bread board" device capable of remotely testing any sensor; microwave, infrared or ultrasonic, etc. to ensure it is working properly.

IMPACTS

- Ensures intruders will be detected.
- Reduces the liability of unreliable security sensors.
- Allows security forces to take compensatory measures for defective sensor systems.

IDAS/FLIGHT LINE SECURITY

CUSTOMER/FUNDING

USAF - SAC
Army
Navy
Marine Corp

FY 92 Funds - $200K

ISSUE

Most security systems require expensive maintenance. Many systems can not be relocated. Goal is to find a relocatable cheap alternative.

PRODUCT

A cost effective, wireless area sensor.

IMPACTS

- Save costs in maintenance.
- Improved reliability.
- Deployable.

NON-HARDWIRE/NON-RF DATA LINK

CUSTOMER/FUNDING

USAF - Security Police
Army - Program Mgt for Phy Sec Eq
Navy - Naval Inv Service Cmd

FY 92 Funds - $170K

ISSUE

- Long logistic "tail" needed to support the hardwire connections for sensors/ systems.
- Frequency assignment virtually impossible or crowded.

PRODUCT

Develop a method of sending sensor data to a control center without using hardwire cable or radio frequency. Microwave or laser technologies will be examined for feasibility.

IMPACTS

- Reduce logistic support.
- Increase amount of data transmitted, number of users.

FOCAL PLANE ARRAY SENSOR

CUSTOMER/FUNDING

USAF - Security Police
Army - Program Mgr for Phy Sec Eq
Navy - Naval Inv Service Cmd

FY 92 Funds - $500K

ISSUE

Insufficient security force reaction time to intrusions due to limited range of detection sensors and systems

PRODUCT

Develop and demonstrate a long range detection sensor using large arrays of infrared image pixels to provide "television quality" imagery in real time for assessment of intruders.

IMPACTS

- Detection and assessment of intruders before they reach the protected area.
- Allows security forces time to interdict, delay, and deny hostile forces.

DUAL PURPOSE THERMAL IMAGER

CUSTOMER/FUNDING

USAF - Security Police
Army - Program Mgr for Phy Sec Eq
Navy - Naval Inv Service Cmd

FY 92 Funds - $300K

ISSUE

Insufficient security force reaction time to intrusions due to limited range of detection sensors and systems.

PRODUCT

Develop and demonstrate a single, common, high-resolution, high-scan rate thermal image sensor that will detect at long range and present "snap frame" scene imagery in near real time for automatic target assessment.

IMPACTS

- Detection and assessment of intruders before they reach the protected area.
- Allows security forces time to interdict, delay, and deny hostile forces.
- May eliminate the need for additional costly sensor systems.

IDS FROM MOVING PLATFORM

CUSTOMER/FUNDING

ARMY - Program Mgr - Phy Sec Eq

FY 92 Funds - $650K

ISSUE

Most sensors are static and limited in their field of detection.

PRODUCT

Develop a mobile sensor system capable of detection while continually in motion.

IMPACTS

- Increases the range and capability of detection systems.
- Anticipated uses include weapon storage areas, open storage areas, warehouse storage areas.
- Possible reduction in security forces through the use of robotic devices.
- Possible spin-off technology for the battlefield.
- Reduces human error.

LASER DENIAL

CUSTOMER/FUNDING

USAF - Security Police
ARMY - ARDEC

FY 92 Funds - $650K

ISSUE

Response force options short of deadly force is limited in the protection of secure areas.

PRODUCT

Eye safe, hand held, portable breadboard laser system designed to delay and deny access to secure areas.

IMPACTS

- Deters intrusions.
- Delays or denies access to critical resources without severe bodily harm.
- Impairs optical systems used by intruders.
- Provides better control as a well-focused point system as opposed to broad area coverage.
- May be cheaper than costly microwave systems.

MODELING FOR PERSONNEL VERIFICATION

CUSTOMER/FUNDING

USAF
Army

FY 92 Funds - $200K

ISSUE

Many previous security requirements have been established with little or no validation. Given the current effort to reduce defense spending. Tools need to be developed which clearly measure security effectiveness.

PRODUCT

Develop a security model which can measure security effectiveness, cost/benefit analysis and other trade-offs.

IMPACTS

- Provides security planners with a method to identify where security manpower cuts should be taken.

- Provides a recommendation on the proper mix of manpower and equipment.

ADVERSARY TESTING

CONCEPT

DESCRIPTION

- SPONSORED BY DNA
- OBJECTIVES:
  TO PROVIDE CREDIBLE ADVERSARY
  TO TEST NUCLEAR SECURITY CONCEPTS
- ADVERSARY TEAMS PROVIDED BY 1ST SOCOM
- PROVIDES MULTI-SERVICE/AGENCY TEST SUPPORT
- PROVIDES KNOWLEDGEABLE INPUT AT PHYSICAL SECURITY CONFERENCES

USER	ACTION	TEST SCHEDULE
PM-NUC	SOC TESTS	NOV 89
PM-NUC	SOC DOOR TESTS	NOV-DEC 89
PM-NUC	MASS TESTS	MAY 90
PM-NUC	UGS CONCEPTS	JUL 90
NCERL	MAGAZINE DOOR TESTS	JUL 90

FUNDING

	FY 88	FY 89	FY 90	FY 91	FY92
6.2	$20K	40K	40K	60K	60K

PHYSICAL SECURITY EQUIPMENT

CHART A

DNA RDT&E PROGRAMS

($ IN THOUSANDS)

PROGRAMS	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98
1. Security Concepts Development	2361	3287	2072	2053	2335	2470	2460	2460
2. Advanced Sensor Technology	485	1550	1585	1620	970	560	673	600
3. Mobile Platforms	250	170	425	450				
4. Secure Storage and Transport				450	560	935	500	500
5. Waterside Security	2315	1700	545	505	1246	1152	1367	1440
PROGRAM TOTAL	5411	6707	5037	5083	5111	5117	5000	5000

PHYSICAL SECURITY EQUIPMENT

CHART B

DNA SECURITY CONCEPTS DEVELOPMENT RDT&E PROGRAM

($ IN THOUSANDS)

PROJECTS	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98
1. Active Denial	1876	1810	1327	1093				
2. Sonic Denial	485	544						
3. Laser Denial		933	745	960	1220	881	1010	1460
4. Future Commercial PS Tech. and Cap Forecast					360	186		
5. Threat Determination Model					460	336		
6. Advanced Security Lighting					295			
7. PS Modeling of Complex Bldg Int						261	400	
8. Artificial Retinas						361	250	
9. Moving Veh/Veh Barrier Model						211		
10. Blast Loads on Non-Planar Bldg Elements						234		
11. New Concepts Development							800	1000
GRAND TOTAL	2361	3287	2072	2053	2335	2478	2460	2460

DNA

DoD Physical Security Master Plan
Equipment Implementation

	A # Required	B # Implemented	C # Not Implemented	D # At Issue
MANAGEMENT OPTIONS				
RDT&E Programs	31	31	0	0
Procurement Programs				
SUMMARY ACTIONS				
TOTAL	31	31	0	0

Estimated Completion Dates (of Column C)

50% Completion Date	0
75% Completion Date	0
100% Completion Date	0

Note: Columns B + C + D = A

DNA
DoD PHYSICAL SECURITY MASTER PLAN
EQUIPMENT IMPLEMENTATION
COMPLETELY IMPLEMENTED ITEMS

SHORT TITLE	OPTION #	PAGE	REMARKS	DATE
1. Defense Intelligence Threat Data System (DITDS)	5.1	C-5-1	Transitioned to DIA	DEC 89
2. Recovery Technology	5.2	C-5-1	Transitioned to ATSD (AE)	SEP 90
3. Tactical Engagement Simulation System (TESS)	5.3	C-5-2	Transitioned to USAF	SEP 89
4. Insider Vulnerabilities	5.4	C-5-2	Transitioned to ATSD (AE)	SEP 90
5. Adversary Testing	5.5	C-5-2	Multi- Service use	SEP 90
6. Maintenance and Assembly (M&A) Building Vulnerability	5.6	C-5-3	Transitioned to DA	SEP 89
7. Personnel Reliability Program (PRP) Study	5.7	C-5-3	• Eliminated	NA
8. Security Response Capability	5.8	C-5-4	• Eliminated	NA
9. Area Illuminated Leaky Cable (AILCS)	5.9	C-5-4	Transitioned to USAF	DEC 89
10. Tactical Intrusion Detection System (TIDS)	5.10	C-5-5	Transitioned to USAF	FY 91

• MONEY FROM ELIMINATED PROGRAMS APPLIED TO ACTIVE DENIAL

DNA

DoD PHYSICAL SECURITY MASTER PLAN

EQUIPMENT IMPLEMENTATION

COMPLETELY IMPLEMENTED ITEMS

SHORT TITLE	OPTION #	PAGE	REMARKS	DATE
11. TIDS Algorithm Verification	5.11	C-5-5	Combined with TIDS for Transition to USAF	FY 91
12. Mobile Intrusion Detection and Assessment System (MIDAS)	5.12	C-5-5	Continuing	
13. Extended Security Zone	5.13	C-5-5	• Eliminated	NA
14. Tactical/Field Security	5.14	C-5-6	• Eliminated	NA
15. Smart Sensors	5.15	C-5-6	• Eliminated	NA
16. Exterior Active Protection System (EAPS)	5.16	C-5-6	Continuing as Active Denial program	
17. New Sensor Technology	5.17	C-5-7	Starts FY 94	NA
18. Robotics for Physical Security	5.18	C-5-7	FY 91 monies will be extended	MID FY 92
19. Underwater Robotics	5.19	C-5-7	Transition to Navy	FY 91
20. Hardened Warhead Containers	5.20	C-5-7	• Eliminated	NA

• Money from eliminated programs applied to Active Denial

DNA

DoD PHYSICAL SECURITY MASTER PLAN

EQUIPMENT IMPLEMENTATION

COMPLETELY IMPLEMENTED ITEMS

SHORT TITLE	OPTION #	PAGE	REMARKS	DATE
21. Underground Storage	5.21	C-5-8	Transitioned to DA	Sep 90
22. Maintenance and Assembly Secure Storage	5.22	C-5-8	Transitioned to DA	Sep 90
23. Sticky Foam	5.23	C-5-8	Transitioned to DA	Sep 89
24. Storage and Movement Vulnerabilities	5.24	C-5-9	• Eliminated	NA
25. Explosive Entry Data	5.25	C-5-9	Transitioned to ATSD(AE)	Sep 90
26. Fence Testing	5.26	C-5-9	Completed	Sep 89
27. Advanced Storage Technology	5.27	C-5-9	• Eliminated	NA
28. Swimmer Identification System (SIDS)	5.28	C-5-10	Continuing	
29. Waterside Lightweight Barrier (WLB)	5.29	C-5-10	Continuing	
30. Movable Broadband Sonar (MBS)	5.30	C-5-10	FY 91 Funds extended and MBS included into SIDS program	
31. Shallow Water Intrusion Detection System (SWIDS)	5.31	C-5-10	Continuing	

• Money from eliminated programs applied to Active Denial

Attachment H

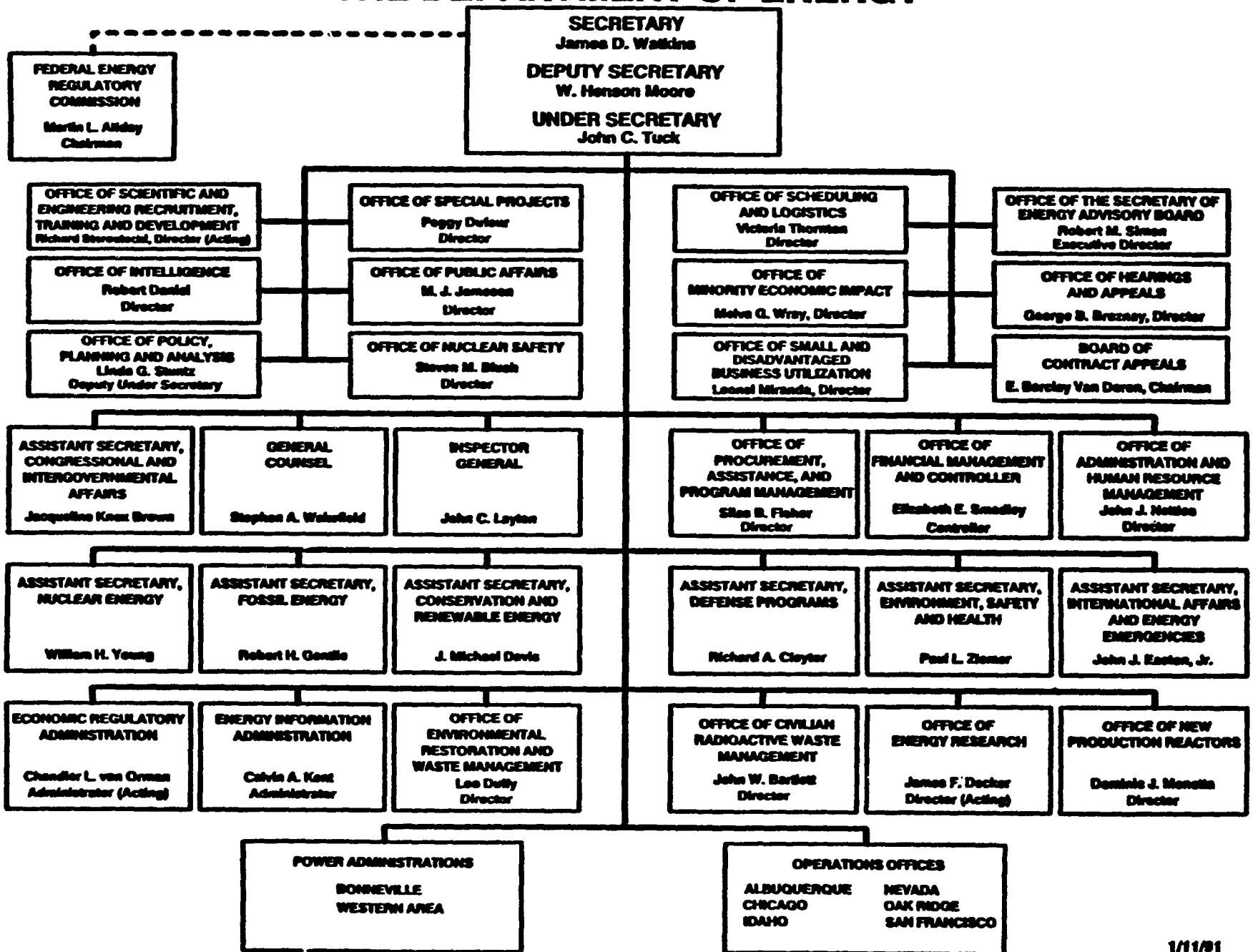
DOE Presentation Charts

PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

PROGRAM BRIEFING

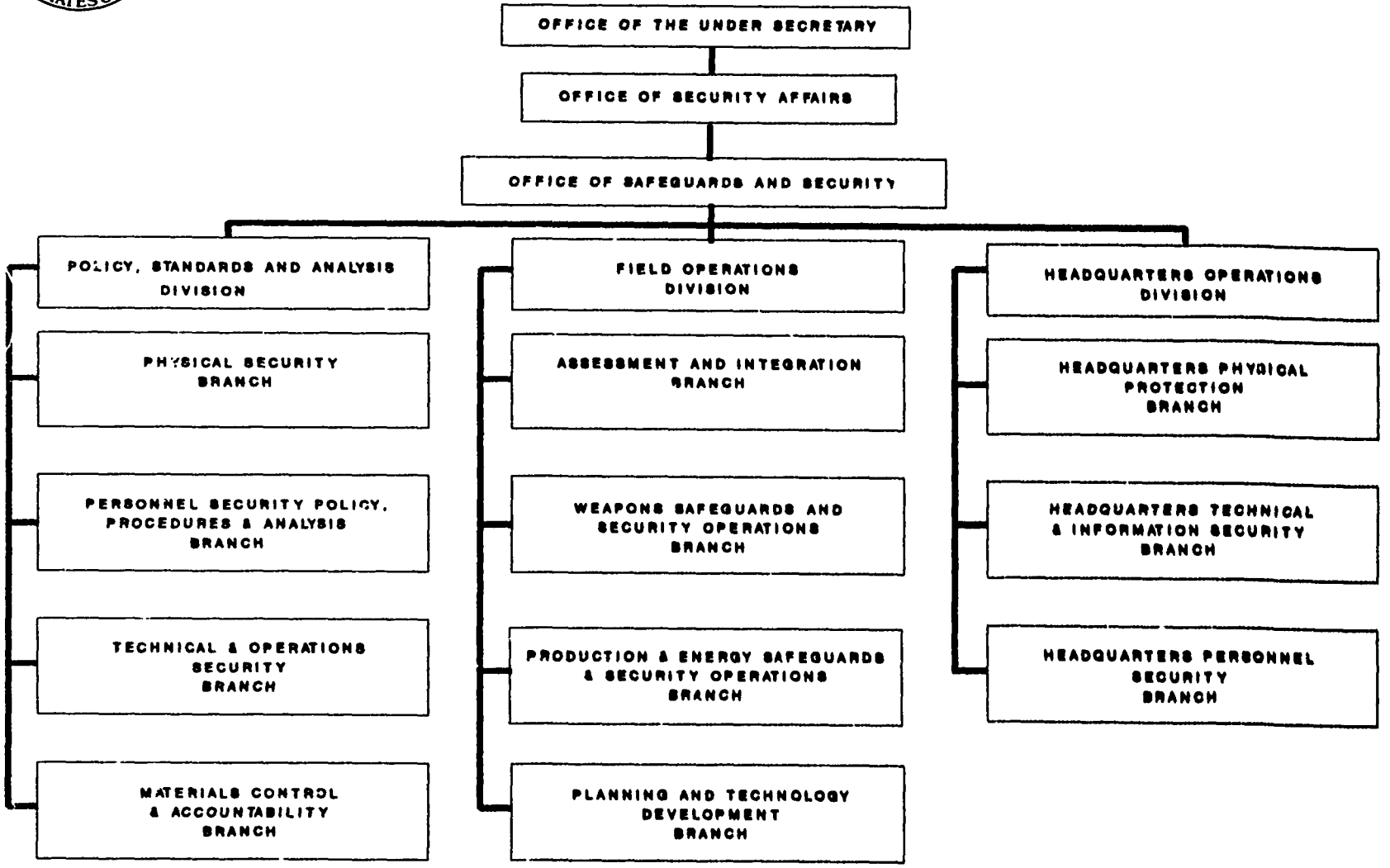
MANAGING THE OSS TECHNOLOGY DEVELOPMENT PROGRAM

THE DEPARTMENT OF ENERGY



1/11/91

PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH



PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

RESOURCE PROFILE

POSITION	INCUMBENT	RESPONSIBILITIES
BRANCH CHIEF	SMITH	PROGRAM MANAGEMENT MATERIAL CONTROL MATERIAL ACCOUNTABILITY
GENERAL ENGINEER	POCRATSKY	PHYSICAL SECURITY SYSTEMS COMPUTER SECURITY
GENERAL ENGINEER	VACANT	
PROGRAM ANALYST	VACANT	
SECURITY SPECIALIST	CHERRY	SYSTEMS INTEGRATION AND EVALUATION INFORMATION SECURITY PERSONNEL SECURITY

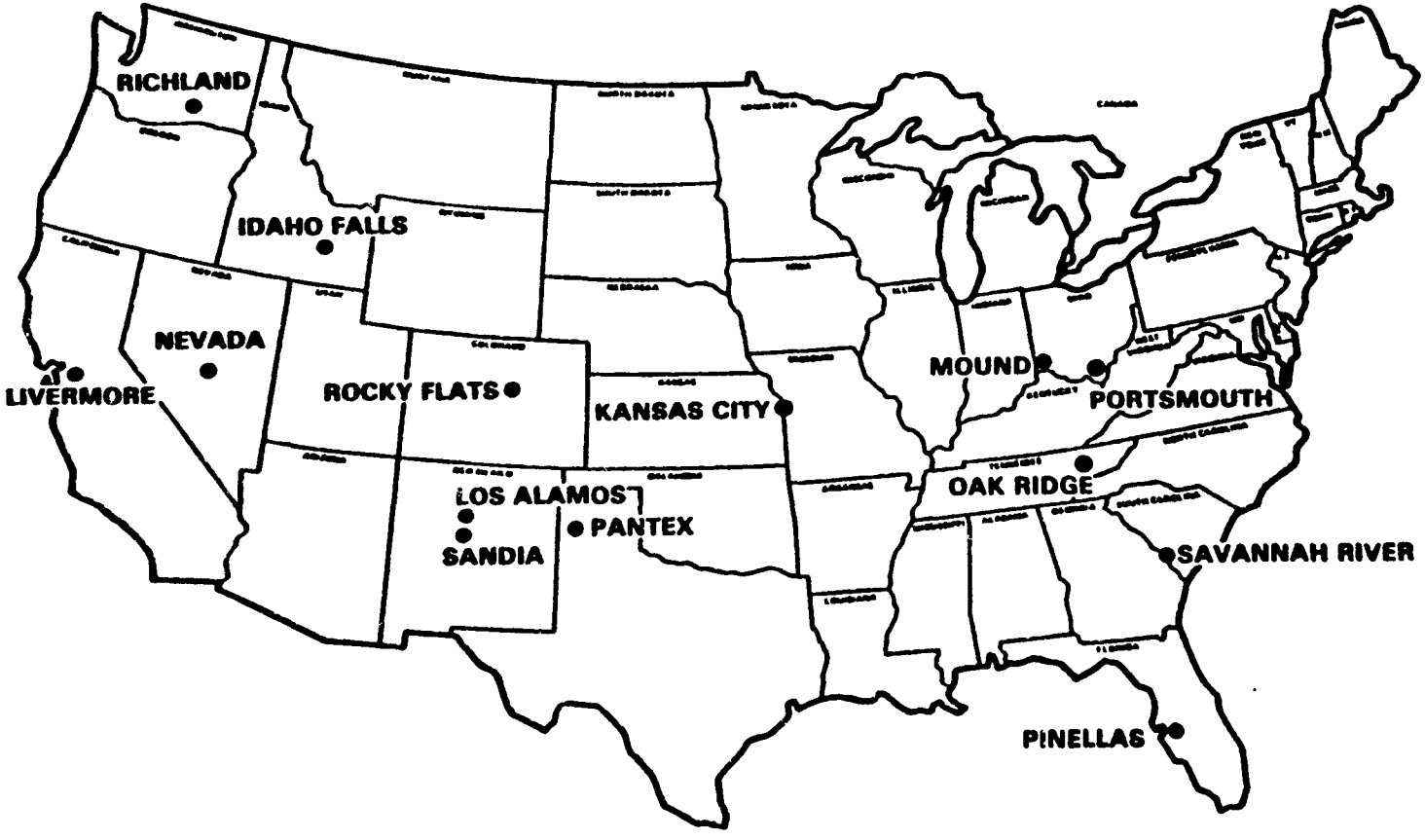
PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

MISSION

PROVIDE OVERSIGHT, PLANNING AND COORDINATION TO ENSURE THAT SAFEGUARDS AND SECURITY RESEARCH AND DEVELOPMENT EFFORTS ARE RESPONSIVE TO USER NEEDS AND POLICY OBJECTIVES.

PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

DOE NUCLEAR FACILITIES



PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

TYPICAL DOE FACILITIES REQUIRING PROTECTION

- PRODUCTION REACTORS & PROCESS FACILITIES
- MATERIAL HANDLING (GLOVE BOX) AND TRANSPORT
- SENSITIVE R&D FACILITIES
- WEAPONS TEST SITES
- WEAPONS COMPONENT FABRICATION FACILITIES
- WEAPONS ASSEMBLY FACILITIES

PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

THREAT

- HISTORICALLY - OUTSIDER THREAT
- RECENT EMPHASIS - INSIDER THREAT
  - PASSIVE/ACTIVE
  - RATIONAL/IRRATIONAL
  - VIOLENT/NONVIOLENT
- OBJECTIVES AND METHODOLOGY - DIVERSE
  - SABOTAGE
  - THEFT OF SNM

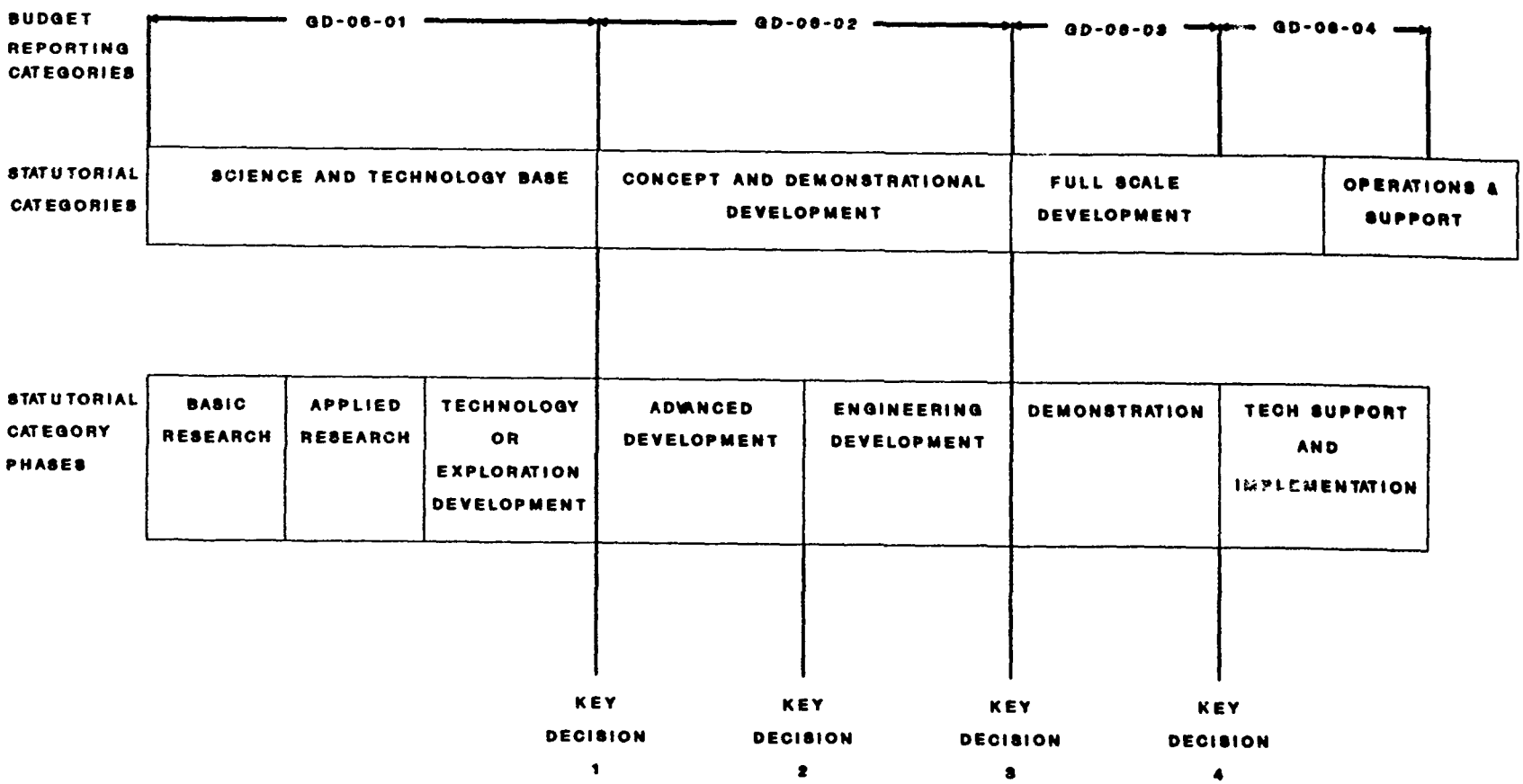
PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

RESPONSIBILITIES

- PROGRAM MANAGEMENT FOR ALL DOMESTIC DOE SAFEGUARDS & SECURITY RESEARCH AND DEVELOPMENT
- R&D PROGRAM PLANNING, FORMULATION AND EXECUTION
- OVERSIGHT AND DIRECTION OF SPECIAL & UNIQUE R&D PROJECTS
- SUPPORT APPLICATION OF S&S SYSTEMS AND CONCEPTS TO FIELD
- IDENTIFICATION AND PRIORITIZATION OF FIELD NEEDS
- DEVELOPMENT OF SAFEGUARDS & SECURITY PLANNING DOCUMENTS
- TECHNOLOGY TRANSFER TO FIELD OFFICES AND INDUSTRY
- LIAISON WITH GOV'T AGENCIES, FACILITY OPERATORS, VENDORS & CONTRACTORS

PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

RESEARCH AND DEVELOPMENT ACQUISITION PHASES



PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

RESEARCH AND DEVELOPMENT DISCIPLINES

PHYSICAL PROTECTION	MATERIAL CONTROL AND ACCOUNTING	COMPUTER AND INFORMATION SECURITY	PERSONNEL SECURITY RESEARCH & ANALYSIS
INTRUSION DETECTION	CONTAINMENT TECHNOLOGY	CLASSIFIED DOCUMENT CONTROL	INSIDER PROTECTION
BARRIERS/ACCESS DENIAL	NUCLEAR MATERIALS DETECTION & SURVEILLANCE	DATABASE MANAGEMENT SYSTEMS SECURITY	HUMAN RELIABILITY
ENTRY & ACCESS CONTROL	CONFIRMATORY & SEMI-QUANTITATIVE MEASUREMENTS	NETWORK SECURITY	TECHNICAL SURVEILLANCE COUNTERMEASURES
VITAL COMPONENTS TAMPER SAFING & MONITORING	PROCESS OPERATIONS MONITORING	VIRUS & MALICIOUS CODE DEFENSIVE MECHANISMS	HUMAN RELIABILITY PROGRAMS
COMMUNICATIONS, RESPONSE AND NEUTRALIZATION	DATA MANAGEMENT & SIGNAL ANALYSIS, DECISION LOGIC FOR ASSESSMENT SYSTEMS	SYSTEM SECURITY MAINTENANCE SOFTWARE	OPERATIONAL SECURITY
ALLARM & ASSESSMENT SYSTEMS	MBA REPORTING & ACCOUNTING	DISTRBUTED AUDIT STANDARDS AND REQUIREMENTS	
	MEASUREMENT TECHNOLOGY	COMPUTER INCIDENT ADVISORY CAPABILITY	
	DEVELOPMENT OF REFERENCE STANDARDS		
	MEASUREMENT CONTROLS CALIBRATION		

PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

KEY LABORATORIES

LABORATORY	CONCENTRATION OF SUPPORT TO OSS
LOS ALAMOS	MATERIAL CONTROL & ACCOUNTABILITY; COMPUTER SECURITY
SANDIA	PHYSICAL PROTECTION (ALL ASPECTS)
OAK RIDGE	PHYSICAL PROTECTION (EXPLOSIVES DETECTION)
LAWRENCE LIVERMORE	COMPUTER SECURITY; MATERIAL ACCOUNTABILITY
AMES	MATERIAL ACCOUNTABILITY
BROOKHAVEN	MATERIAL CONTROL & ACCOUNTABILITY; SYSTEMS INT. & TRAINING
MOUND	MATERIAL ACCOUNTABILITY
ARGONNE	INTEGRATED SYSTEMS OPERATIONAL TEST & EVALUATION
IDAHO NAT'L ENGINEERING	PHYSICAL SECURITY (EXPLOSIVES DETECTION)

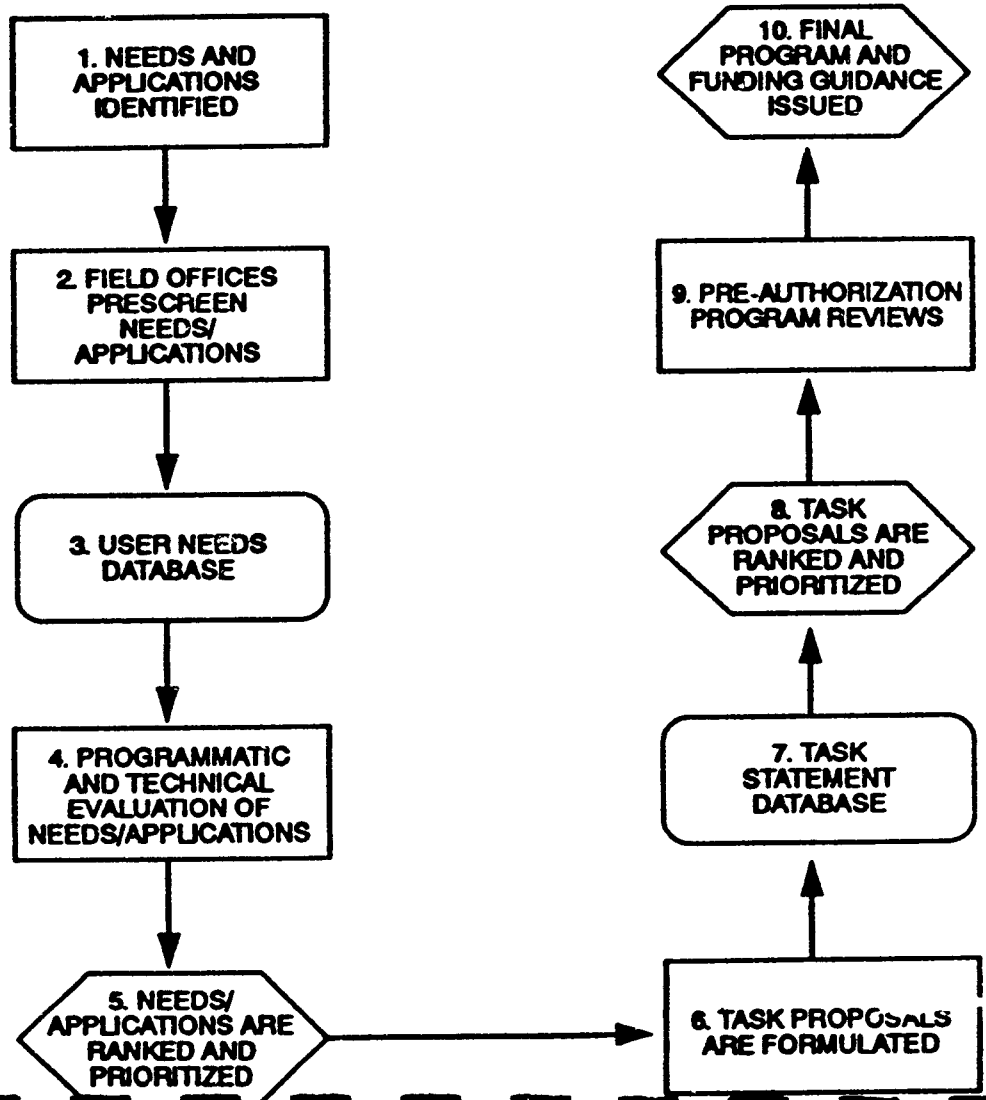
PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

CENTER OF EXCELLENCE CONCEPT

- CONCENTRATE SPECIFIC DISCIPLINES AT SPECIFIC LABORATORIES
- MAINTAINS FOUNDATION OF TECHNOLOGY RESOURCES
- REDUCES COMPETITION BETWEEN LABORATORIES
- INDUSTRY INTERFACES THROUGH LABORATORIES

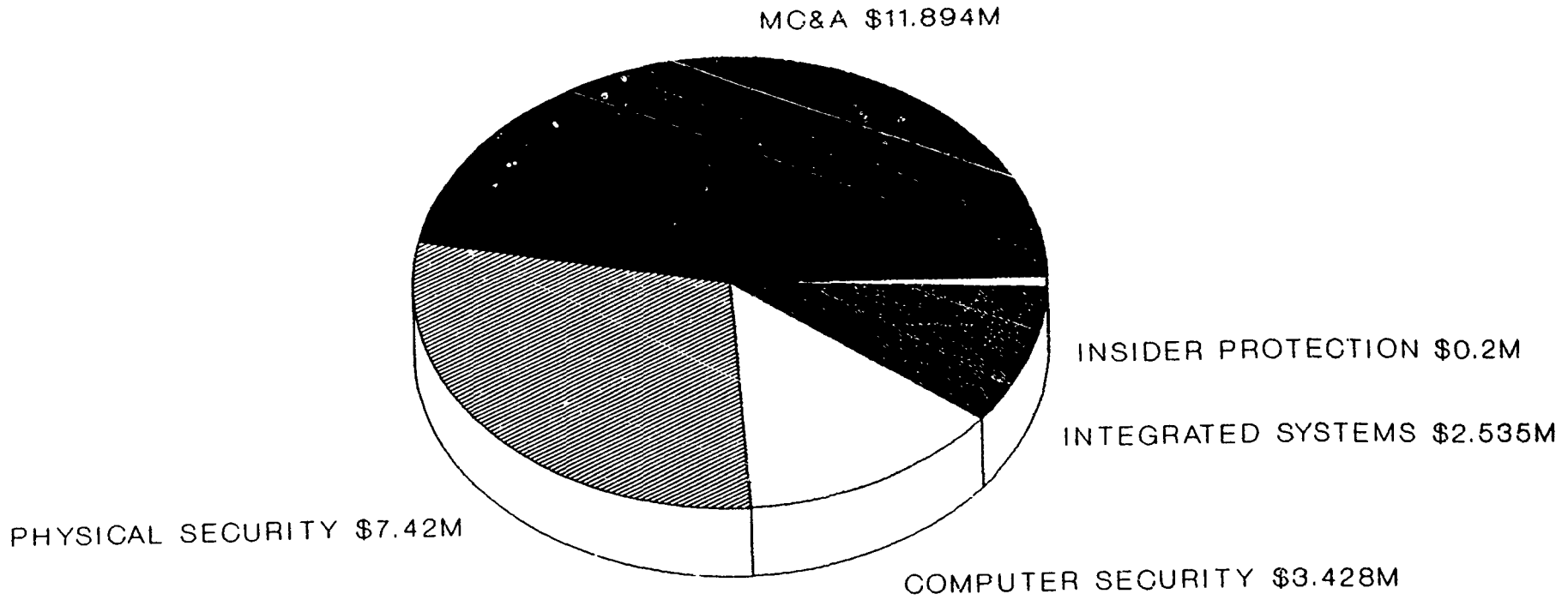
PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

TASK EVALUATION PROCESS



PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

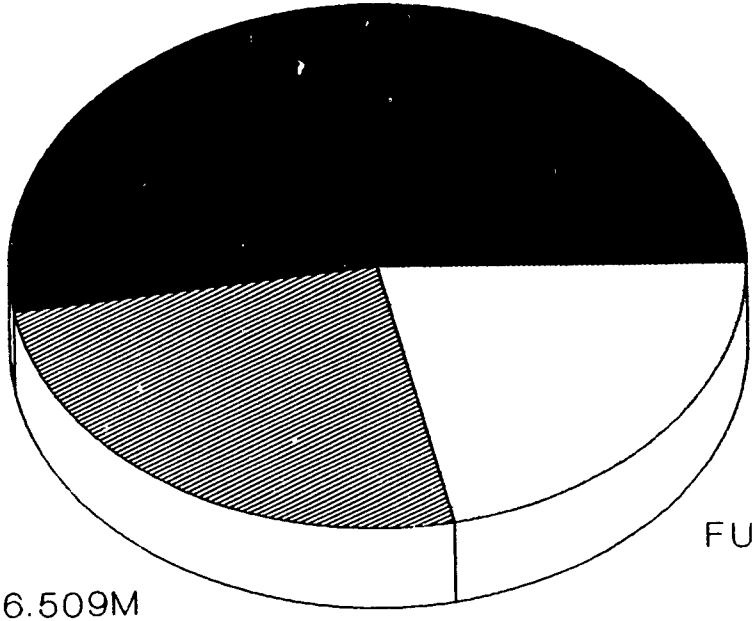
LEVEL OF EFFORT WITHIN S&S DISCIPLINES



PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

LEVEL OF EFFORT WITHIN R&D PHASES

SCIENCE & TECH BASE $13.323M

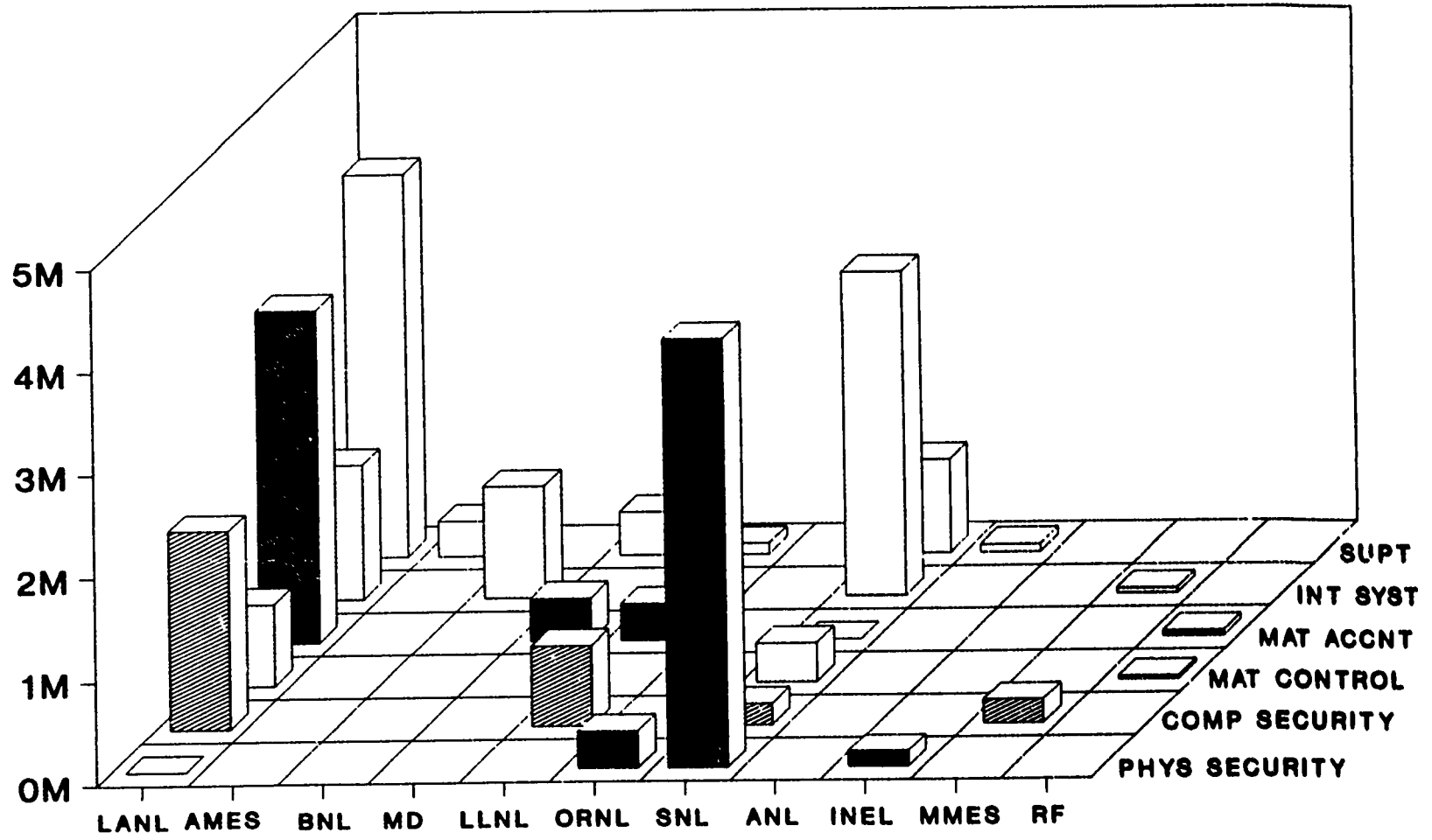


FULL SCALE DEVEL $5.535M

CONCEPT & DEMO DEVEL $6.509M

PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

RESOURCE DISTRIBUTION



PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

ADDRESS

OFFICE OF SAFEGUARDS AND SECURITY

CHIEF, PLANNING AND TECHNOLOGY DEVELOPMENT BRANCH

ATTN: SA-134

U.S. DEPARTMENT OF ENERGY

WASHINGTON, DC 20585

TELEPHONE: (301) 353-2545

(FTS) 233-2545

FAX: (301) 353-4164

Attachment I
Action Items

ACTION ITEMS

	ACTION AGENCY
1. Provide portable explosives detector update briefing from the Naval EOD Technical Center. Suspense: Next JRWG.	Navy
2. Provide unit cost for magazine security system for nuclear weapons afloat and program element code for procurement for both the security of Nuclear Weapons (Ashore) and Nuclear Weapons (Afloat). Suspense: Next PSEAG Executive Session in August or September 1991.	Navy
3. Take the appropriate action to initiate the requirement process for an airborne detection capability. Suspense: Next PSEAG Annual Review in May 1992.	Air Force
4. Report the status of the DISS JSOR. Suspense: Next PSEAG Executive Session.	Air Force
5. Report the amount of RDT&E funding for active denial by year and identify the source. Suspense: Next PSEAG Executive Session.	Air Force
6. Revalidate SAC's requirement for active denial and determine if SAC is willing to provide funding. If not, provide a revised funding matrix. Suspense: Next PSEAG Executive Session.	Air Force
7. The SEIWG will provide periodic updates on their support efforts (using available in house expertise) for the development of Government specifications for PSE. Status of support activities will be reported at future PSEAG Executive Sessions. An initial report is due at the August/September 1991 Executive Session.	SEIWG Chairman
8. Add Denial Systems to the Joint Requirements List (carryover item from 27 February 1991 PSEAG Executive Session). Suspense: Next PSEAG Executive Session.	Air Force